

SECTOR: HEALTHCARE

HSS104-NQ2013: Primary Healthcare and Emergency
Medical Response

NVEQF Level 1 (CLASS IX)

STUDENT WORKBOOK



प.सु.श.केन्द्रीय व्यावसायिक शिक्षा संस्थान, श्यामला हिल्स, भोपाल
PSS Central Institute of Vocational Education, Shyamla Hills, Bhopal

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Student Details

Student Name: _____

Student Roll Number: _____

Batch Start Date: _____

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Preface

The National Curriculum Framework, 2005, recommends that children's life at school must be linked to their life outside the school. This principle makes a departure from the legacy of bookish learning which continues to shape our system and causes a gap between the school, home, community and the workplace.

The student workbook on “**Primary Healthcare and Emergency Medical Response**” is a part of the qualification package developed for the implementation of National Vocational Education Qualification Framework (NVEQF), an initiative of Ministry of Human Resource Development (MHRD), Government of India to set common principles and guidelines for a nationally recognized qualification system covering Schools, Vocational Education and Training Institutions, Technical Education Institutions, Colleges and Universities. It is envisaged that the NVEQF will promote transparency of qualifications, cross-sectoral learning, student-centred learning and facilitate learner's mobility between different qualifications, thus encouraging lifelong learning.

This student workbook, which forms a part of vocational qualification package for student's who have passed Class VIII or equivalent examination, was created by a group of experts. The Healthcare Sector Skill Council (HSSC) approved by the National Skill Development Corporation (NSDC) for the healthcare sector developed the National Occupation Standards (NOS). The National Occupation Standards are a set of competency standards and guidelines endorsed by the representatives of Healthcare Industry for recognizing and assessing skills and knowledge needed to perform effectively in the workplace.

The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), a constituent of National Council of Educational Research and Training (NCERT) in association with Healthcare Sector Skill Council (HSSC) has developed modular curricula and learning materials (Units) for the vocational qualification package in Healthcare sector for NVEQ levels 1 to 4; level 1 is equivalent to Class IX. Based on NOS, occupation related core competencies (knowledge, skills, and abilities) were identified for development of curricula and learning modules (Units).

This student workbook attempts to discourage rote learning and to bring about necessary flexibility in offering of courses, necessary for breaking the sharp boundaries between different subject areas. The workbook attempts to enhance these endeavours by giving higher priority and space to opportunities for contemplation and wondering, discussion in small groups and activities requiring hands-on-experience. We hope these measures will take us significantly further in the direction of a child-centred system of education outlined in the National Policy of Education (1986).

The success of this effort depends on the steps that school Principals and Teachers will take to encourage children to reflect their own learning and to pursue imaginative and on-the-job activities and questions. Participation of learners in skill development exercises and inculcation of values and creativity is possible if we involve children as participants in learning, and not as receiver of information. These aims imply considerable change in school routines and mode of functioning. Flexibility in the daily time-table would be a necessity to maintain the rigour in implementing the activities and the required number of teaching days will have to be increased for teaching and training.

ABOUT THE WORKBOOK

This workbook is to assist you with completing the Unit of Competency **HSS104-NQ2013: Primary Healthcare and Emergency Medical Response**. You should work through the workbook in the classroom, at the workplace or in your own time under the guidance and supervision of your teacher or trainer. This workbook contains sessions which will help you to acquire relevant knowledge and skills (soft and hard) on various aspects of the unit of competency. Each session is small enough to be easily tackled and digested by you before you move on to the next session. Animated pictures and photographs have been included to bring about visual appeal and to make the text lively and interactive for you. You can also try to create your own illustrations using your imagination or taking the help of your teacher. Let us now see what the sections in the sessions have for you.

Section1: Introduction

This section introduces you to the topic of the Unit. It also tells you what you will learn through the various sessions covered in the Unit.

Section 2: Relevant Knowledge

This section provides you with the relevant information on the topic(s) covered in the session. The knowledge developed through this section will enable you to perform certain activities. You should read through the information to develop an understanding on the various aspects of the topic before you complete the exercise(s).

Section 3: Exercise

Each session has exercises, which you should complete on time. You will perform the activities in the classroom, at home or at the workplace. The activities included in this section will help you to develop necessary knowledge, skills and attitude that you need for becoming competent in performing the tasks at workplace. The activities should be done under the supervision of your teacher or trainer who will guide you in completing the tasks and also provide feedback to you for improving your performance. To achieve this, prepare a timetable in consultation with your teacher or trainer and strictly adhere to the stipulated norms or standards. Do not hesitate to ask your teacher or trainer to explain anything that you do not understand.

Section 4: Assessment

The review questions included in this section will help you to check your progress. You must be able to answer all the questions before you proceed to the next session.

SESSION 1: ESSENTIALS COMPONENTS OF PRIMARY HEALTHCARE

Relevant Knowledge

Access to healthcare has been considered a greater challenge to other challenges including affordability and availability of quality healthcare. Medical treatment is not just providing treatment to sick patients but extends to well-being of the people in community and includes disease prevention and promoting good health, and lifestyle habits. There evolved a specific goals and objectives for maintaining health of an individual as well as community. To achieve these objectives appropriate systems need to be developed to measures taken to prevent diseases on one hand and promote good health on other side with provision for treatment of diseases on other side. Various studies indicated that significant population in India borrow money to meet their healthcare costs which are sudden and unexpected. A large population every year moves below poverty line in India and healthcare expenses being one of the major reasons. Thus the progress of the country depends on strong health system and preventive health. It is essential to develop good systems to include preventive health, have effective immunization, provide adequate understanding and care for maternal and child health, effective reimbursement or insurance mechanism to reimburse the costs of medical treatment, mechanism to manage epidemics and good emergency transport system to provide pre hospital care during emergencies.

Primary Health Care

Health is defined as “State of complete physical, mental and social wellbeing and not merely an absence of disease or infirmity.” Primary Health Care is medical care available to people at first level, it combines all the available medical facilities at the community for improving health status. Primary Health Care is defined as an essential healthcare based on scientific methods, universally accessible to the individuals and family in community at a cost which community and country can afford. It is the first level of contact of the individuals and integrates the family and the community with the national health system bringing healthcare as close as possible to where people live and work which includes awareness on preventive health, first level care at the community, immunization, alerts awareness and precautions in case of epidemics, referral of patients to appropriate care facility, supportive supervision and guidance and logistic support and supplies. Primary Health Care is conceived as an integral part of the country’s plan for socio economic development. In India Primary Health Care is delivered by individuals doctors in private sector and infrastructure in public sector comprising of Village level Accredited Social Health Activist (commonly known as ASHA), Village level ANM, Sub Centers and Primary Health Centers.

Millennium Development Goals

The eight Millennium Development Goals (MDGs) adopted by the United Nations in the year 2000 called for concerted action to improve global health and their indicators. All 189 United Nations member states and at least 23 international organizations have agreed to achieve these goals by the year 2015. Multiple indicators were identified to be arranged in patterns to compare health status of various areas, regions, states, countries. Efforts are made in the direction to better parameters, in last decade efforts are giving results. The goals are:

1. Eradicating extreme poverty and hunger,
2. Achieving universal primary education,
3. Promoting gender equality and empowering women,
4. Reducing child mortality rates,
5. Improving maternal health,
6. Combating HIV/AIDS, malaria, and other diseases,
7. Ensuring environmental sustainability, and
8. Developing a global partnership for development.

The various indicators of 5 goals of MDGs, directly related to health are given in the table below:

Goal 1. Eradicate extreme poverty and hunger	
Indicator 4.	Prevalence of underweight children under five years of age
Indicator 5.	Proportion of population below minimum level of dietary energy consumption
Goal 4. Reduce child mortality	
Indicator 13.	Under – five mortality rate
Indicator 14.	Infant mortality rate
Indicator 15.	Proportion of 1- year old Children immunized against measles
Goal 5. Improve maternal health	
Indicator 16.	Maternal Mortality ratio
Indicator 17.	Proportion of births attended by Skilled Health Personnel
Goal 6. Combat HIV/ AIDS, malaria and other diseases	
Indicator 18.	HIV prevalence among young people aged 15 to 24 years
Indicator 19.	Condom use rate of the contraceptive prevalence rate
Indicator 20.	Number of children orphaned by HIV/AIDS
Indicator 21.	Prevalence of death rates associated with malaria
Indicator 22.	Proportion of population in malaria-risk areas using effective malaria Prevention measures
Indicator 23.	Prevalence and death rates associated with tuberculosis

Indicator 24.	Proportion of tuberculosis cases detected and cured under Directly Observed Treatment Short Course – DOTS
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Components of Primary Health Care

The essential components of Primary Healthcare are as follows:

- Education about prevailing health problems and methods of preventing and controlling them
- Promotion of food supply and proper nutrition
- Adequate supply of water and basic sanitation
- Maternal and Child Healthcare including family planning
- Immunization against infectious diseases
- Prevention and control of endemic diseases
- Appropriate treatment of common diseases and injuries
- Provision of essential drugs

Activity:

Visit and learn

Visit your nearest primary health center and spend a day, enlist all the services provided by the primary health center

Exercise

Think, learn
and Discuss

1. Find out about importance given to Primary Health Care during ancient civilization in India and compare with the basic approach for Primary Health Care in modern times.
2. Find out about the concept of Health For All by 2000 A.D and describe basic principles and strategies of Health For All Development
3. Read about healthy living practices and prepare a chart of 10 ways to stay healthy

4. Describe preventive aspects of healthcare
5. Find out and learn about epidemics and role of preventive health in epidemics.

Assessment

I. Define the following:

a) Health

b) Primary Health Care

II. Enlist the essential components of Primary Health Care and your understanding of each of the eight essential components.

III. Describe your understanding of Millennium Development Goals 4 and 5. ?

IV. Fill in the blanks:

1. Health is defined as complete _____, _____ and _____ well-being which is essential for leading productive life.
2. Millennium development goals were adopted by _____ in year 2000.
3. In India, primary health care services are generally provided by _____.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part A

- Define Health and Primary Health Care
- Discuss Millennium Development Goals 4 and 5

Part B

Discussed in class the following:

- Essential components of Primary Healthcare.

Part C

Performance Standards

The performance standard may include, but not limited to:

Performance standards	Yes	No
Able to identify the need of Primary Health Care		
Able to specify the essential components of Primary Health Care		
Able to describe Millennium Development Goal 4 and 5		

SESSION 2: DEMONSTRATE CHAIN OF SURVIVAL

Relevant Knowledge

In our day-to-day life we come across many medical emergencies; in few medical emergencies we come across unconscious/unresponsive patients, or seriously ill patients who need attention and no immediate professional medical help is available. In such case every second counts. Under such circumstances, it is quite common that everyone attempts to help in their own way to rescue the victim. Instead if one, who is a qualified First Aider or Doctor takes lead and adopts a standard approach to respond, it would increase the chances of survival.

Emergency Medical Response

Medical Emergency is any medical condition which has a sudden onset, unexpected occurrence needs attention, may be a dangerous, may possess an immediate risk to person's life, limb, organ or long term health. Considering the emergency situation and availability of resources, the Emergency Medical Response varies. However a standardized approach with sequential steps, well reinforced in the society and healthcare provider, followed systematically helps in increasing chances of survival and faster recovery. Emergency Medical Response is standard medical response by a first responder or qualified medical professional based on his competency provided to emergency victim which would help in increasing the chances of survival.

Chain of Survival

In life threatening events in out of hospital scenarios, when one comes across an unconscious patient or seriously ill patients (appears to have dead) there are series of actions, if put into action would increase the chances of survival of the patient. These series of action are termed as "Chain of Survival" in various resuscitation guidelines.



Courtesy : <http://www.cardiaid.com/en/Home,1.html>

Step 1. Ensure Scene Safety – In emergency resuscitation the first principle is safety, unless you are safe, you can't provide help to others. Ensure the location is safe for yourself, the victim who is in emergency condition and also the bystanders around.

Step 2. Check for response from Victim – It is essential to understand if the victim is conscious and is able to respond. To check this gently shake his shoulder and ask him loudly "Are you O.K", "Can you hear me".

Step 3. Check for Response – If he responds, ensure he is in position in which you find him, ensure there is no further danger from surroundings, try to identify the cause and provide necessary help, seek for medical attention and try to transfer him to a medical facility as early as possible.

If he doesn't respond –

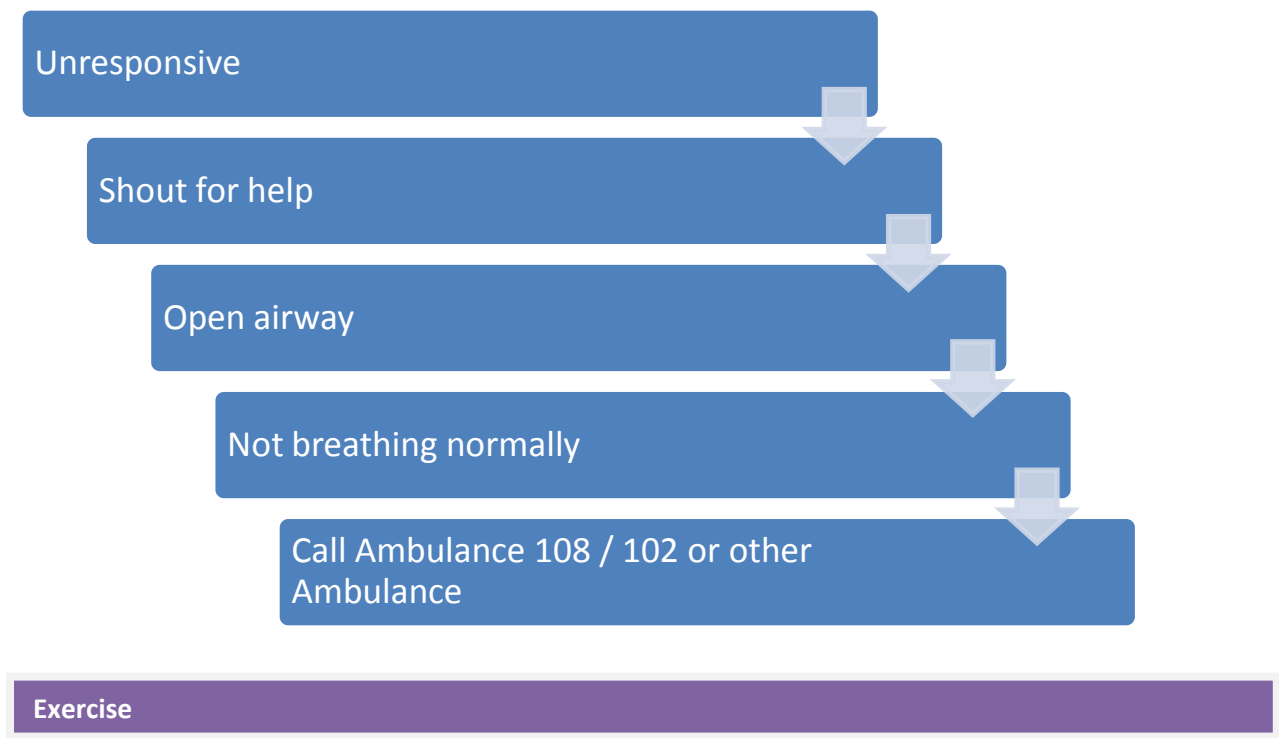
- Immediately shout for help
- Turn him onto his back
- Open Airway using head tilt and chin lift method
- Place your hand on his forehead and gently tilt his head back
- With your fingertips under the point of victim's chin, lift the chin to open the airway.
- Keeping the airway open
 - Look - Look for chest movement
 - Listen - at the victim's mouth for breath sounds
 - Feel for breathing - feel for air on your cheek
- Identify if breathing is normal, not normal or absent

If breathing normally, turn him into appropriate position (side position with head dependent, with no pressure on the chest) ensuring the position is stable. Also ensure that there is no obstruction to

breathing. Seek help, Call for Ambulance, Call National Ambulance Service Telephone Numbers i.e. 108 or 102 or any other ambulance service available.

Continue to assess breathing, check if breathing is normal. **If the breathing is not normal** or absent, alert the ambulance service, attempt to bring an Automated External Defibrillator (AED) if available, and attempt Cardio Pulmonary Resuscitation (CPR). (CPR method would be taught to you in subsequent NVEQF levels).

The simple model of Emergency Medical Response can be represented as below, further it is followed by CPR which would be taught in subsequent levels.



Think, learn
and Discuss

Role Play

Scenario

1. An unconscious patient is lying at a bus stand. People are standing around him. Imagine, you are a trained "First Aider" and you have to respond to the situation. What will you do?

Assessment

I. Short Answer Question.

1. Define the following:

a) Medical Emergency

b) Emergency Medical Response

c) Chain of Survival

2. Enlist steps involved in chain of survival

3. Expand the abbreviation "CPR"?

II. Fill in the blanks

4. CPR Stands for _____ .

5. To open airway place your hand on his forehead and gently _____ his head back, with your fingers under the point of victim's chin _____ the chin to open the airway.

6. Keeping the airway open _____ for chest movements, _____ at the victim's mouth for breath sounds, _____ for air on your cheek.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for Assessment Activity:

Part A

- Define Medical Emergency.

- Define Emergency Medical Response
- Describe Chain of Survival
- Outline the steps involved in Chain of Survival
- Describe how to open airway
- Describe how to assess if the victim is breathing or not.

Part B

Discussed in class the following:

- Discuss the Chain of survival and its components.

Part C

Performance Standards

The performance standard may include, but not limited to:

Performance standards	Yes	No
Respond appropriately to a medical emergency		
Open airway of a unresponsive patient		
Assess if the victim is breathing or not		
Demonstrate the steps in the chain of survival		

GLOSSARY

Code Blue - a hospital's emergency call for professionals to respond to a person in cardiac arrest.

Triage - classification of ill or injured persons by severity of conditions, most commonly occurs in emergency room.

LIST OF CONTRIBUTORS

1. **Mr. Babu Khan**, C.E.O, Healthcare Sector Skill Council, Office No.: 711, DLF Tower A, 7th Floor, Jasola, New Delhi.
2. **Dr. Shradha Mishra**, Dy. Director, Healthcare Skill Sector Council, Office No.: 711, DLF Tower A, 7th Floor, Jasola, New Delhi.
3. **Dr. Vijay Reddy**, Project Manager, MIHER SKILLS ACADEMY, A-10, Nizamuddin East, New Delhi.
4. **Dr. Tomas Madayag**, Director of International Training & Development, Vidyanta Skills Institute, New Delhi)
5. **Mrs Priyamboda Mohanty**, Assistant Manager(Training)Office- IL&FS ETS-Health Initiative Team, NTBCL Building, DND Flyway, Toll Plaza, NOIDA, UP.
6. **Dr. Yogesh Yadav**, Associate Professor, Department of Anatomy, Rama Medical College, Ramadeli, NH-24 Ghaziabad.
7. **Dr. Anuj Bansal**, Associate Professor, Department of Physiology, Rama Medical College, Ramadeli, NH-24 Ghaziabad.
8. **Mr. Navin Bhatia**, Managing Director, Navkar Skills, New Delhi.
9. **Prof. S.B Arora**, School of Health Sciences, Indira Gandhi National Open University, Maidan Garhi, New Delhi.
10. **Prof. P.V.P. Rao**, Professor, Department of Health and Paramedical, PSS C I V E (NCERT), Shyamla Hills, Bhopal.
11. **Prof. Suniti Sanwal**, Head, Department of Humanities, Science and Educational Research, PSS C I V E (NCERT), Shyamla Hills, Bhopal.
12. **Prof. V.S.Mehrotra**, Head, NVEQF Cell, PSS C I V E (NCERT), Shyamla Hills, Bhopal .
13. **Dr. A. Nayak**, Associate Professor, Department of Health and Paramedical, PSS C I V E (NCERT), Shyamla Hills, Bhopal.

Dr. A. Nayak- Coordinator, Health Care Sector, PSSCIVE(NCERT), Bhopal

Composing, Typing and Setting- Mr. Vinod Soni, PSSCIVE(NCERT), Shyamla Hills, Bhopal.