CONTENTS

Health Care Standard (HC Standard®) ......................................................................................... 1
Million Hearts Kits ......................................................................................................................... 1
Mifi Wireless Access ..................................................................................................................... 2
PC Device ....................................................................................................................................... 2
  Navigating the Web Application ................................................................................................. 3
  Using the Blood Pressure Clinic Matrix .................................................................................... 3
Exporting Patient Data ..................................................................................................................... 5
  How to Create an Individual Patient Report: ....................................................................... 5
  How to Create a Clinic Summary Report ................................................................................. 6
Patient Tracking Devices .................................................................................................................. 7
  How to Use the Patient Tracking App: ..................................................................................... 7
Community Blood Pressure Screening Algorithm ......................................................................... 16
Blood Pressure Screening/Patient Information Form ................................................................. 17
HEALTH CARE STANDARD (HC STANDARD®)

HC Standard® software was developed by Global Emergency Resources (GERS) with emergency response and medical systems in mind. The program is funded and supported through a Hospital Preparedness Program (HPP) grant. The program has been deployed, tested and utilized within hospitals, long term care facilities and EMS services across North Dakota. Current plans are underway to incorporate this in Regional and Local Public Health Units.

The HC Standard® program interface is customizable, easy to use and has the ability to expand and adapt to a variety of needs. HC Standard® has been explored as a platform to use for the Million Hearts Community Blood Pressure Clinics. Forms and matrices have been created to collect and test the viability of data collection on this platform.

MILLION HEARTS KITS

A portion of the Million Hearts grant funding was earmarked and utilized to purchase items needed to perform Community Blood Pressure Clinics. The kits were built based on the recommendations and trial experiences of clinics conducted using HC Standard by Southwest District Public Health. These kits can be ordered from the state medical cache for use in Million Hearts Blood Pressure Clinic Screening.

All kits come packaged in a sturdy pelican case and include:

- 1 Verizon MiFi
- 1 Panasonic Toughbook
- 2 Dell Venue 7” Tablets
- 1 HP Office Jet 4630 Printer
- 1 USB Printer Cable
- 1 Dymo Label Writer 450
- 1 Activa Mobil IT USB Hub (4 Port)
- 1 Surge Protector (6 plug)
MIFI WIRELESS ACCESS

Included in the kit is a Verizon MiFi device. This is a prepaid mobile internet hotspot that can be used for blood pressure clinic setups where other wireless internet options are not available. A limited number of access codes have been purchased, so please check with the North Dakota Department of Health – Emergency Preparedness and Response’s IT staff to determine if there is any availability before your setup or you may need to purchase your own access plan.

PC DEVICE

Each kit has a Panasonic Toughbook PC device. This Toughbook will be able to connect wirelessly to the internet for access to the web-based client version of the HC Standard® software.

The login portal for the web-based client version of HC Standard® is currently available at https://hc.ndhealth.gov/hcs.

Log in to the program using the login credentials that have been provided to you or your health care facility coordinator.
NAVIGATING THE WEB APPLICATION

1. Login at https://hc.ndhealth.gov/hcs
2. Click the name of your facility workspace on the left.
3. In the box titled Matrices, click Blood Pressure Clinic – “facility workspace name”

USING THE BLOOD PRESSURE CLINIC MATRIX

The first time that the blood pressure matrix is utilized; there will not be any records in the matrix to see.

Once information has been entered into the matrix, you will see all the records or patients listed in the default view - one line for each patient across the screen.

You can click any of the various columns at the top to sort patient records alphanumerically as needed.
Click the row of a specific patient to edit their information. (This works in any of the fields such as ‘Temperature’ shown in the following example.)

The recorded information can be viewed in different formats or layouts by clicking the different buttons at the bottom right of the screen.

Green means that is the view that is active.

The first, second, and third views will allow you to edit patient records as well as add a new patient if needed.
**EXPORTING PATIENT DATA**

In the event that a patient needs to be referred to another facility for follow-up, their historical data can be recorded and saved within HC Standard®. The recorded information can be printed out by date ranges.

**HOW TO CREATE AN INDIVIDUAL PATIENT REPORT:**

1. Return to the workspace dashboard for your facility by clicking the facility name on the left-hand side under “Workspaces”.
2. Locate the “Reports” section of the dashboard and click “Patient Details Report”.
3. An option box will open to sort for the patient that the report will be generated for.
To generate a report:

- Select Incident – Blood Pressure Clinic
- Select Matrix – Blood Pressure Clinic – ‘YOUR FACILITY NAME HERE’
- Scroll through the list of patients from your facility - select appropriate patient
- Click the button “OK”

4. Once the report is created - click the printer icon in the silver bar above the output preview screen to print a paper copy of this historical report.

HOW TO CREATE A CLINIC SUMMARY REPORT

1. Return to the workspace dashboard for your facility by clicking the facility name on the left-hand side under “Workspaces”.
2. Locate the “Reports” section of the dashboard and click “Blood Pressure Clinic Summary”.

3. Print your report by clicking the printer icon at the top of the report screen.

PATIENT TRACKING DEVICES

The mobile patient tracking application is built to work on a variety of mobile devices. Some of these devices include Motorola handheld scanners, iPhones and iPads, Android phones and tablets, as well as Windows 8.1 enabled tablets. Each of the different types of devices will have a similar layout and are fully functional, although some screens may appear a little differently. Funding from the Million Hearts campaign provided for the purchase of the devices found in the kits. The devices within the kits are Dell Venue 7” tablets with the Android operating system. For that reason, this guide will include images from this type of device.

The blood pressure clinics can be completed with different devices using different operating platforms.

HOW TO USE THE PATIENT TRACKING APP:

1. Power on the tablet then locate, click the HC Standard® icon on your tablet home screen.
2. Log in to the application with the information provided to you by your training instructor or healthcare facility coordinator.

3. The application start screen will open.

   Please note that the highlighted areas appear blank. This is because no information has been entered yet. This will only appear blank after you login to the application the first time. Incident information will be entered to this area in the next step. In the future, it will be necessary to check the Incident information listed here and ensure that it is correct.

4. Click the Individual button to access the Incident Information Screen
The incident specific screen will open:

5. Complete the fields as follows:
   - Incident: Blood Pressure Clinic
   - Position: Other
   - Division: (Use the drop down to find your home facility)
   - Floor/Number/Unit: (Fill this in to explain the location of your clinic… Example this might read ‘Anderson Electric – Bismarck’ if the clinic is being held at a business site offering the screening to employees.
   - Click “Done” to move on to the patient data screens.

The patient specific screen will open:
6. Press the “Scan” button and scan the barcode on the back of an individual’s driver’s license or other barcode provided for identifying the individual.

If the patient has been screened previously, a pop up message may appear.

7. Click OK to confirm that the two patients are the same individual.

The triage status must be completed. Blood pressure clinic participants can be marked as “Immediate” or “Minor”. **If you choose “Delayed” it will not allow you to save the patient.** “Deceased” is not a pertinent option.
8. To navigate to the next screen, swipe your finger from right to left across the tablet screen surface.

9. On the “Complaint” screen: mark if there are any known issues such as if the patient has diabetes, cardiac issues, respiratory issues, or other medical concerns or comments.

10. Flip to and beyond the next screen by the same right to left surface swipe as before. This will skip a screen for entering injuries.
11. On the “Vitals” screen: record clinically important vital signs

12. After entering the vitals, flip past screens until coming to the Patient Information screen
13. Complete any necessary information. If a driver’s license was scanned to enter patient information, most of these fields will be already completed.

14. The next screen allows more information to be completed on the medical history, if needed such as medications, medical problems, and allergies.

15. The Camera screen allows a photograph to be taken of your patient. This could be useful in the event that printed barcodes are utilized rather than state issued IDs.
16. Swiping past the “Transport” screen, to the “Other Screen”, will provide fields for more data if necessary.

Fields include:

- Email address
- Follow up comments
- Follow up date
- Provider name
- Provider seen
- Reason for referral
- Screener agency
- Screener name
- Screener phone
- Screener title
- Screening date

17. After completing any additional information, swiping again will prompt for the current patient to be saved.

‘Save Patient’ pop up will display

- **Continue with this patient** – to make additional edits to the data entered on this patient.
- **Triage new patient** – to save the data and move to the next person in line.
- **Return to the main screen** – to the data and return to the main or home screen of the application. This is good if you are going to take a break or will be waiting for others to come into the clinic.

**Depending on your device settings, it can take a few minutes for the patient to sync with the server.**
The home screen indicates:

- the date and time of the last sync
- the light will be green, and
- it will show 0 patients on the device when it has successfully uploaded to the server. Internet access is required for the device to sync with the server.
Observation:
- Individual in a seated position
- Level of noise in the room
- Ask about factors affecting BP (coffee, exercise, anxiety, smoking in the last 30 minutes)
- Ask about previous BP dx and/or medications

Wait 1 to 5 minutes

1st Blood Pressure Reading

Normal <120/80
Prehypertension
SBP 120-139 or
DBP 80-89
Hypertension
Stage 1
SBP 140-159 or
DBP 90-99
Hypertension
Stage 2
SBP >160 or
DBP >100
Hypertensive Crisis
SBP >180 or
DBP >110

Wait 1 to 5 minutes

Re-Check
2nd Blood Pressure Reading

Hypertension Stage 1
SBP 140-159 or
DBP 90-99
Hypertension Stage 2
SBP >160 or
DBP >100
Hypertensive Crisis
SBP >180 or
DBP >110

Review Results & Provide
Education
*On follow-up and importance of
blood pressure monitoring

Complete Screening
*Advise recheck again in 2 years.

Provide education
Refer to primary provider for
further assessment

Immediate referral to provider
* Possibly arrange transportation if in
hypertensive crisis.

1 month follow up call by screener
Ask the following questions:
- Was your health care provider seen?
- Was the provider treatment plan followed?
- Is your blood pressure reduced or controlled?
**BLOOD PRESSURE/PATIENT INFORMATION SCREENING FORM**

<table>
<thead>
<tr>
<th>First Name:</th>
<th>Date:</th>
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</thead>
<tbody>
<tr>
<td>Last Name:</td>
<td>Patient ID:</td>
</tr>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td>State:</td>
</tr>
<tr>
<td>Phone:</td>
<td>Email:</td>
</tr>
</tbody>
</table>

**Location of Screening (Floor/Number/Unit):**

**Brief Medical History:**

**Current Medications:**

**Date & Time:** | **Blood Pressure:** | **Weight:** | **Height:** | **Age:**
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<td>2.</td>
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</tbody>
</table>

**Reason for Referral:**

**Physician Name:**

**Physician Seen:**

- ☐ Yes
- ☐ No

**Adherence to treatment:**

- ☐ Yes
- ☐ No

**Blood Pressure reduced or controlled:**

- ☐ Yes
- ☐ No

**If no – why not?**

**Public Health Follow Up Date:**

**Follow up Comments:**

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**Screener Name:**

**Agency:**

**Title:**

**Phone:**

**Signature:**
Program Contact Information

North Dakota Department of Health
Emergency Preparedness and Response Section

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Email: hcstandard@nd.gov