Omniglobe Solutions

presents

Omni Health system

**Recent news : Omni Health system selected by Bill Gates & Melinda foundation**

Current Challenges

• Quality of service issues such as long wait time in emergencies, travel time if living in remote communities, senior homes, etc.

• Doctors facing issues of collaborating critical medical data (heart, brain and muscles) with colleagues and/or specialists real-time.

• Limited government funding.
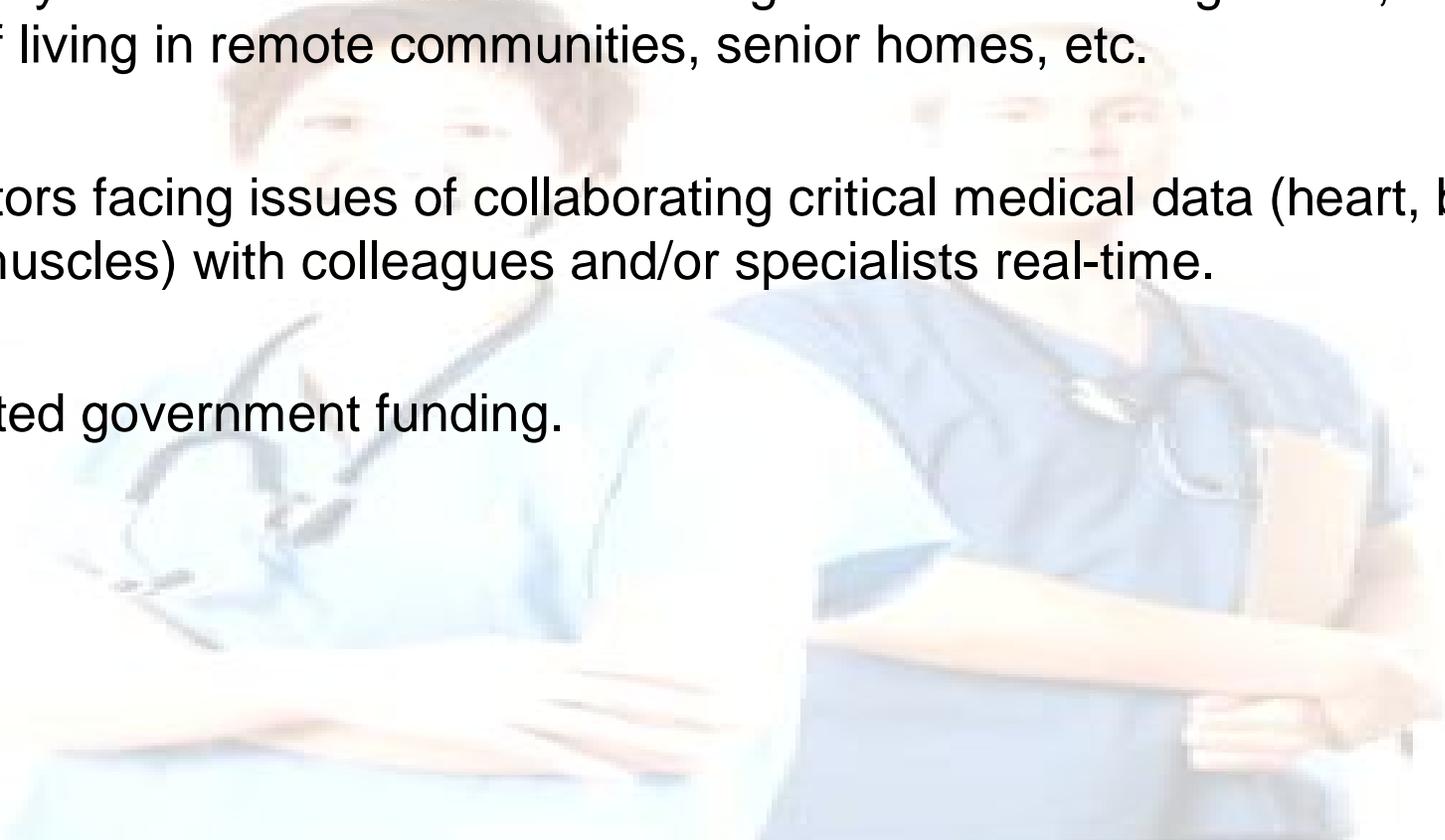
Issues

Primary issues

- Insufficient means to track and diagnose critical areas such as heart, brain and muscle before an individual visits emergency (e.g. from senior homes, nursing homes, remote communities, etc.)

  The systems available now are stove-piped (three systems for heart, brain and muscles) and are high in cost and big in form factor resulting in being un-affordable

- Not enough collaboration between nurses in senior homes, nursing homes, remote communities with specialists

  The current systems produce their individual reports and are not cohesive and in one format. They don't offer real time information sharing

RESULT

- People going to emergency when not needed (statistically more than 90% fall in this category)
- People who truly need service must wait in line
- Quality of service lower

Solution

Develop a way of collecting and analyzing data from people in senior homes, nursing homes and remote communities for critical areas (heart, brain, muscle) and then collaborating with doctors in hospitals and/or specialists. As a result the number of people visiting emergency centers should be reduced thus allowing the health care system to address real emergency cases.
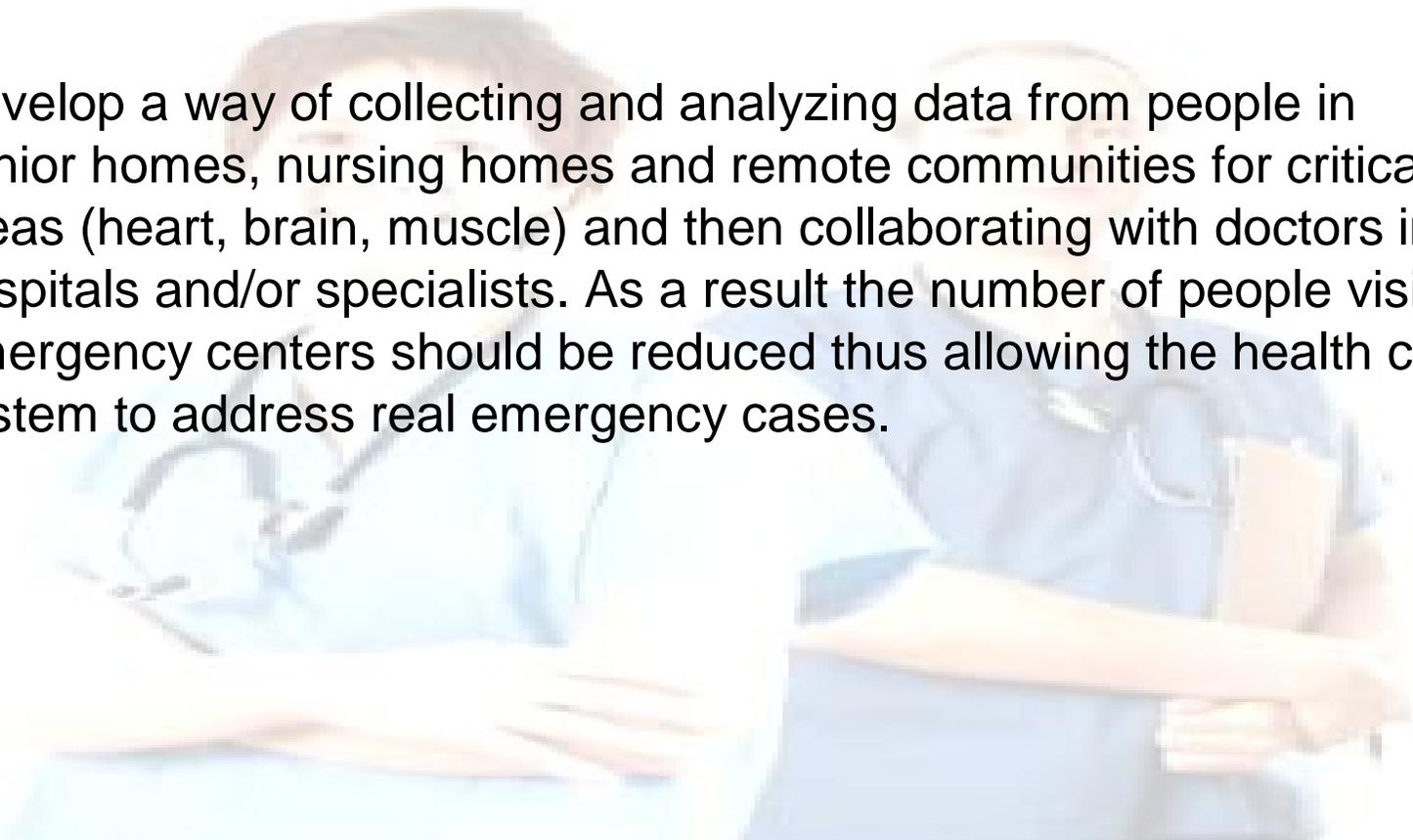
Omni Health System

Omni Health brings next generation tool sets to enable

- collection and consolidation of critical data's from brain, heart and muscles.
- real time collaboration of information (data, voice and video)
- information sharing on a PDA and Smart phones
- integration of sensors for cholesterol, sugar and diabetics all in

ONE SINGLE PLATFORM & can be used in senior homes, nursing homes and remote communities

Doctor's view in hospital

•nursing homes
•small clinics
•senior's homes
•private citizen homes
•military bases

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WAN

Doctor's view remote in blackberry

HOSPITAL

Omni Health capabilities
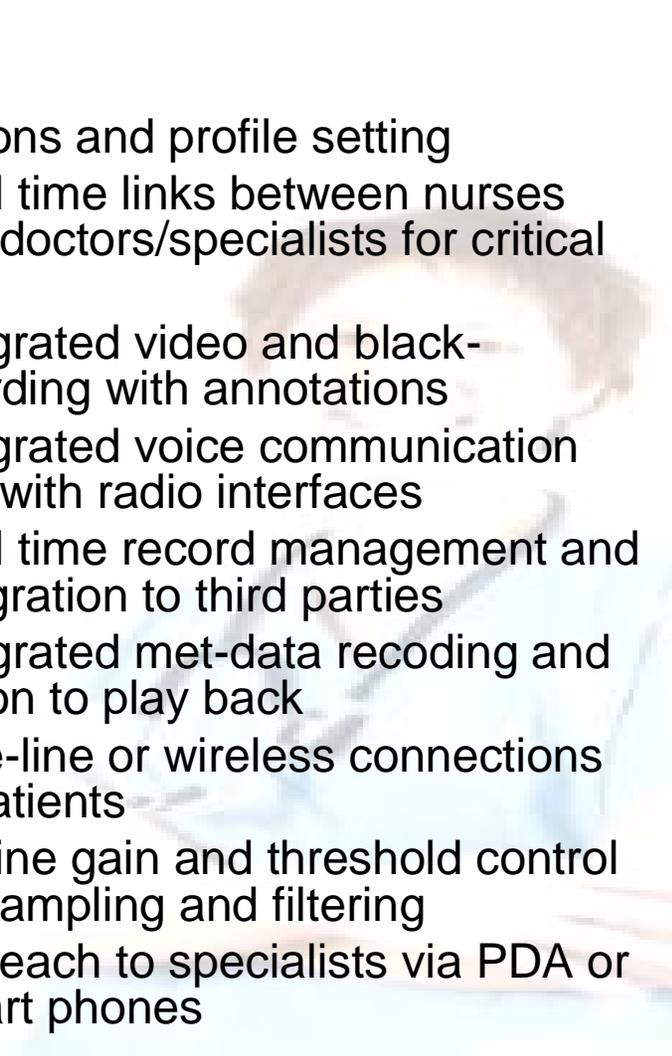
Omni Health	Competitors
1. Logons and profile setting	1. Not available : with competitors
2. Real time links between nurses and doctors/specialists for critical data	2. Not available : with competitors
3. Integrated video and black-boarding with annotations	3. Not available : with competitors
4. Integrated voice communication and with radio interfaces	4. Not available : with competitors
5. Real time record management and integration to third parties	5. Not available : with competitors
6. Integrated met-data recoding and option to play back	6. Not available : with competitors
7. Wire-line or wireless connections to patients	7. Only wire-line for selected devices
8. On line gain and threshold control for sampling and filtering	8. Limited
9. Outreach to specialists via PDA or Smart phones	9. Not available : with competitors

Omni Health User Screen

Omni Health capabilities for Public-Safety/Military

Apart from general capabilities as listed in previous slide: Omni Health also via third party boxes; interfaces to:

- digital T1's or E1's
- VoIP
- ISDN
- 2 W, 4W, 6W Public responder and Military radios

A nurse or an operator can link from mobile health centers to doctors or specialists using the radios or SATCOM's
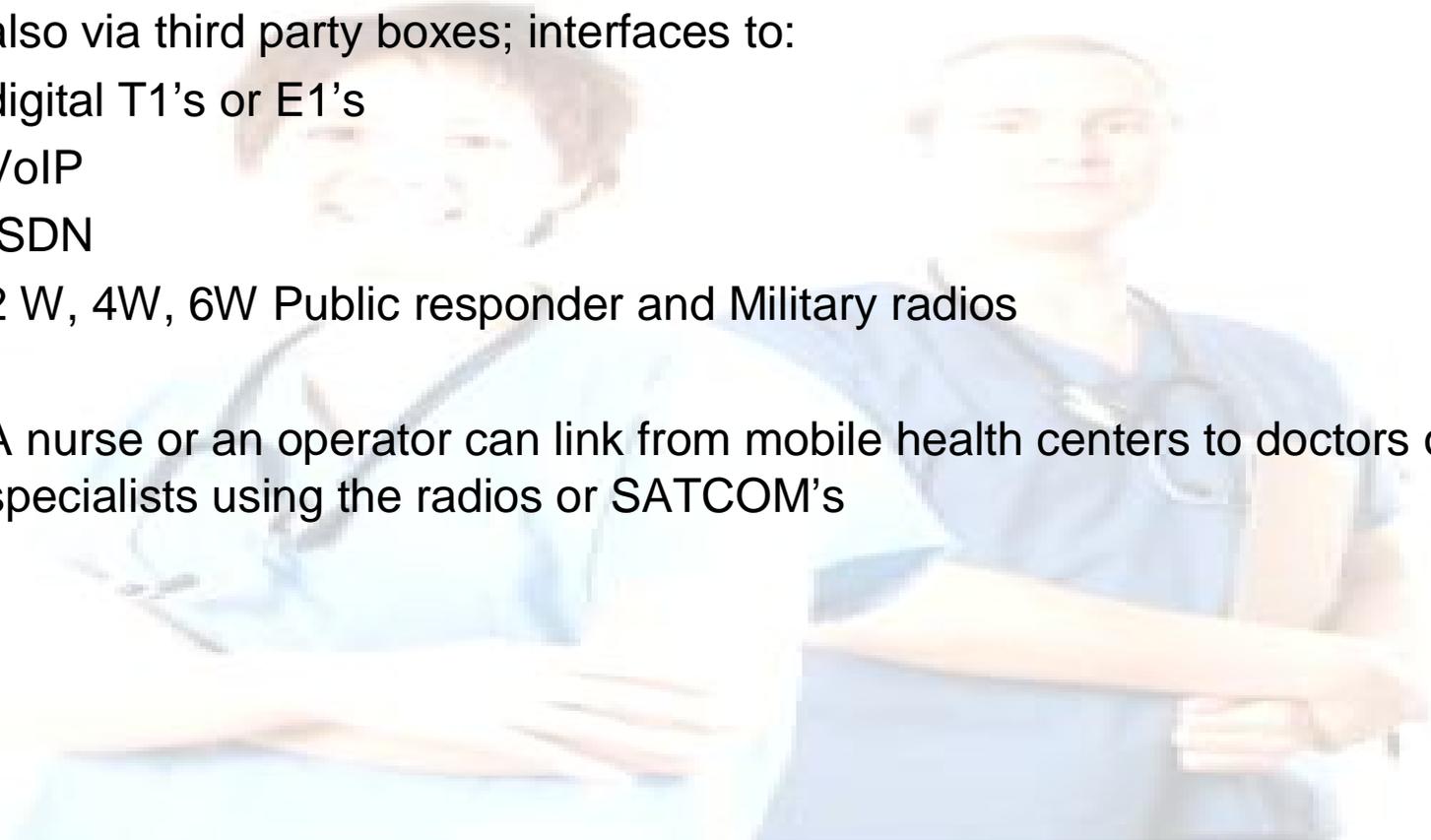
Omni Health Major Discriminators

-Only solution in market today : that does ECG, EEG, EMG & Video/Voice in one system.

-Only portable solution in market today : that allows real time collaboration of real data

-Only solution that offers : out-reach to PDA (fully actionable situation awareness)

-Fully open system : to accommodate growth plug-ins for blood pressure, sugar, cholesterol, etc.
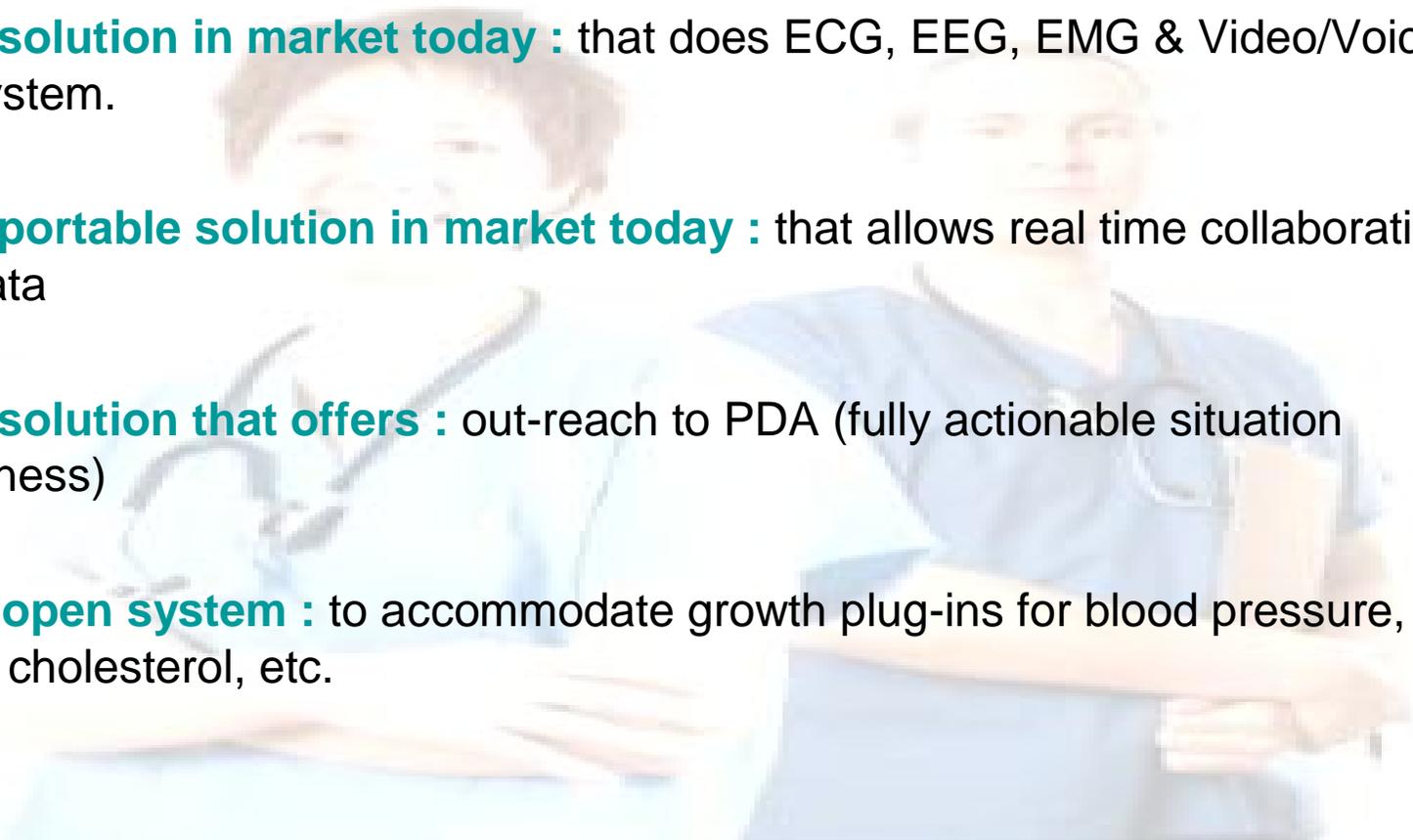
Why Omniglobe solutions
With Omni Health .....

Quality Of Service for seniors, people in nursing homes,
and people in remote communities goes up

Reduces stress on government health care funding

Accurate and timely information to hospitals and specialists
Via PC or PDA

Wait time reduced
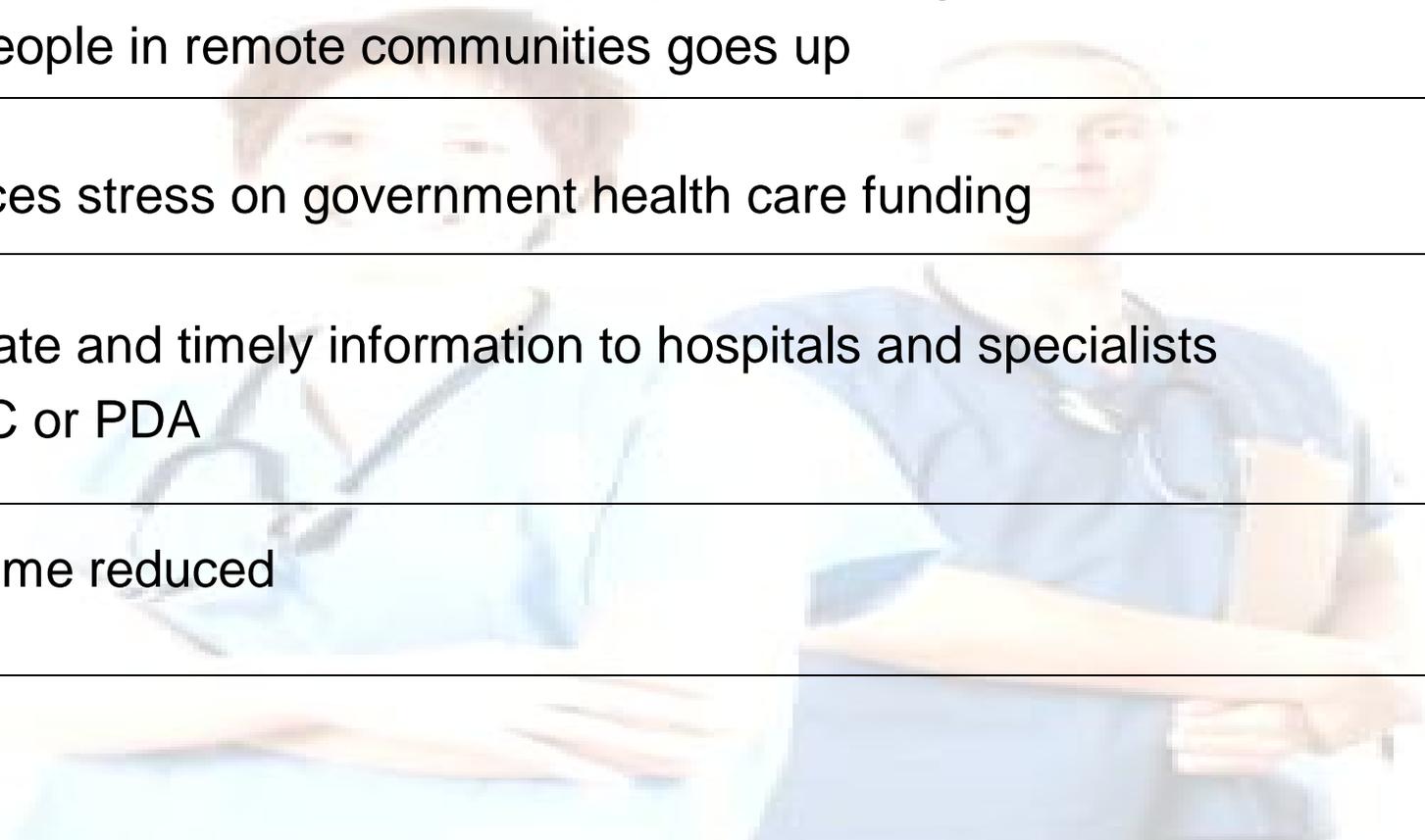
Thank you

For more information

Please contact

Siva@omniglobesolutions.ca

613-866-4940

Appendix

A. Use case for Senior, nursing homes, remote communities and off shore such as ships

B. What do they have now & drawbacks
STOVE PIPED WITH NO COLLOBRATION WITH OFFSITE DOCTORS
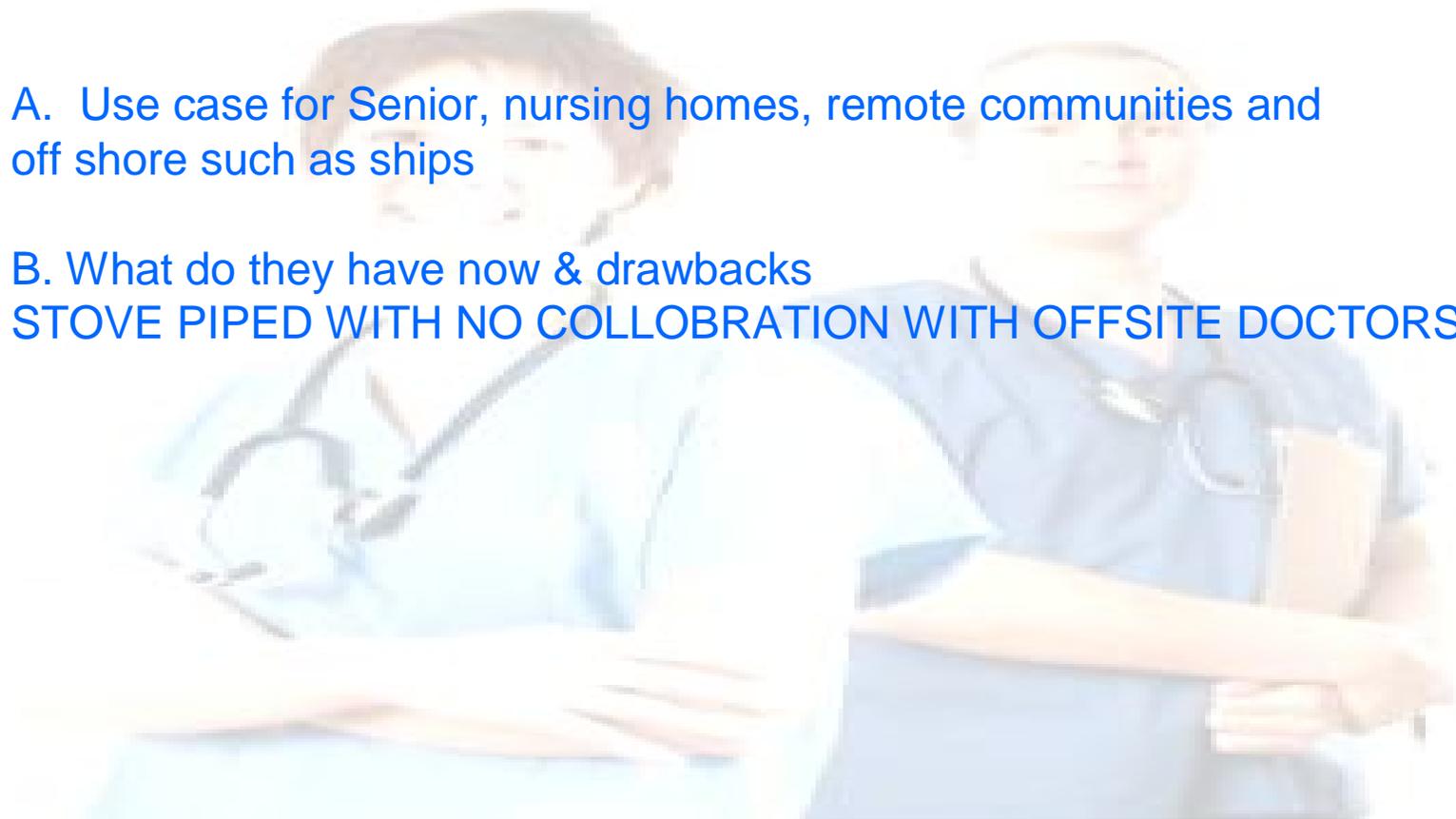
A. Use case for Senior, nursing homes, remote communities and off shore such as ships

Collection side

Nurse

- places the patient in appropriate position and connects sensors to the body

- launches the application (PC based)

- logins with "user name" and "password"

- selects the patient name from pull down list. If not already populated : create a new file with following information:
1. Patient name
2. Patient address
3. Date of birth
4. Medical number
5. Address and phone number
6. Nearest contact person name, relationship, address and phone number
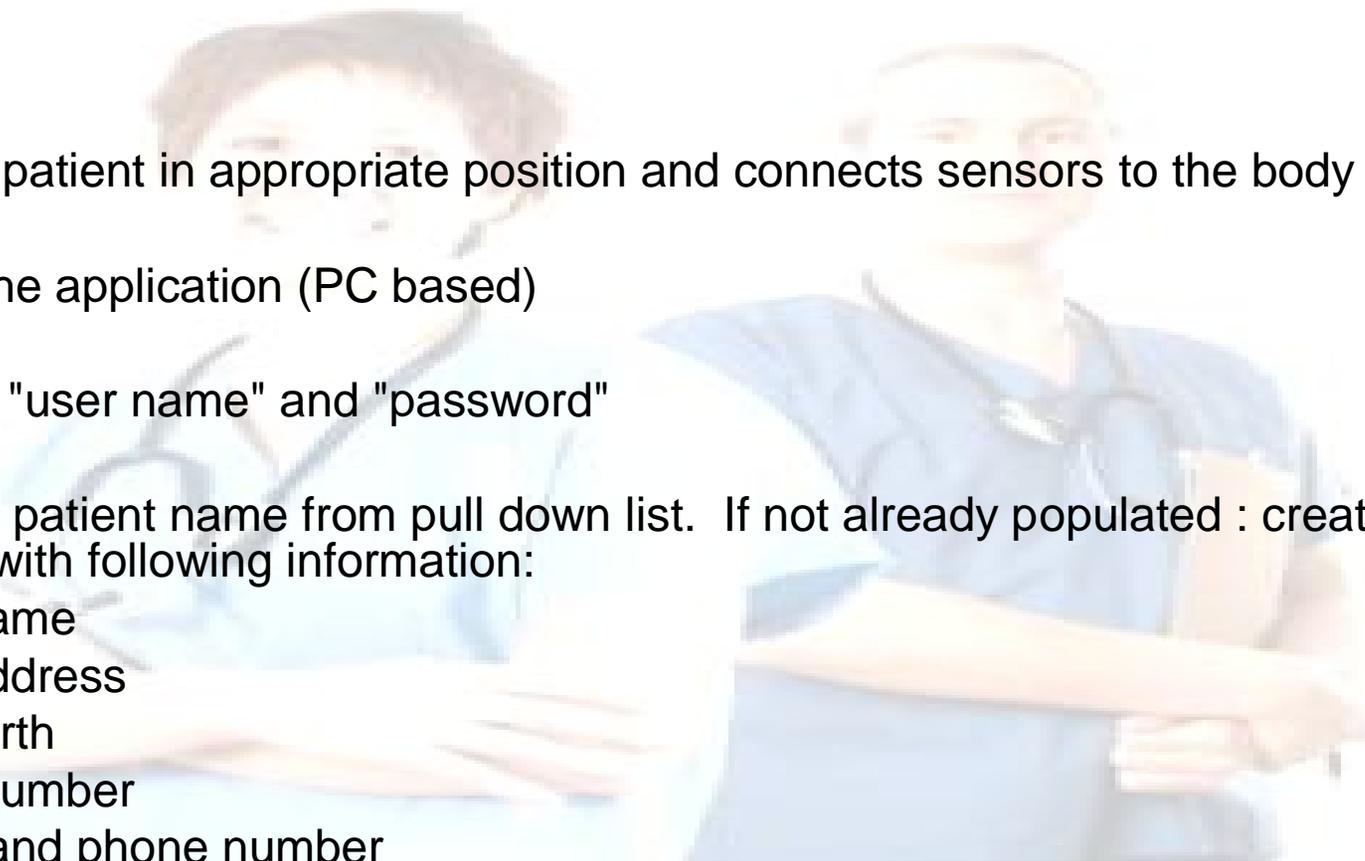
A. Use case for Senior, nursing homes, remote communities and off shore such as ships

- after the above step, selects the doctor associates with the patient. If not available selects the doctor from the populated list and links. During this step, nurse can select multiple doctors. Also has option to call the doctor or doctors via the same system for real time viewing from their hospitals or save the data collected and then call for a doctor or specialists to view the data.

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- adjusts the video camera for proper view if a doctor or specialists are viewing real time. The doctors and specialists would not only see the data real time in their computer and or PDA but can also see the patient via video.

- starts the system to collect the appropriate data (ECG for heart, EEG for brain, EMG for muscles, blood pressure, sugar and cholesterol)

- if real time analysis by doctors or specialist : the nurse and them can on-line communicate via voice, and black boarding. The doctors can also write notes on screen and draw area of interest using annotation that will be visible to all participants.

- the last step is for nurse who can decide if the data needs to be saved or the test re-run. If to be saved the data will be saved under the patients name and time stamped. The nurse also has an option to email the whole proceedings to an another person (doctor or specialists)

A. Use case for Senior, nursing homes, remote communities and off shore such as ships

In off site doctors area

For system with doctors (not on site) the system would be PC or PDA. The application user screen would cater the below

- Login screen with password

- Means of selecting a patient to view from pull down list. If not populated : means to enter information

- Means of selecting ECG, EEG, EMG, Video, data from remote (real time or saved message)

- Means of real time do black boarding, voice communication and chat with nurse or so in remote place

- Means of annotating on data.

- Means of storing the data for later retrieval.
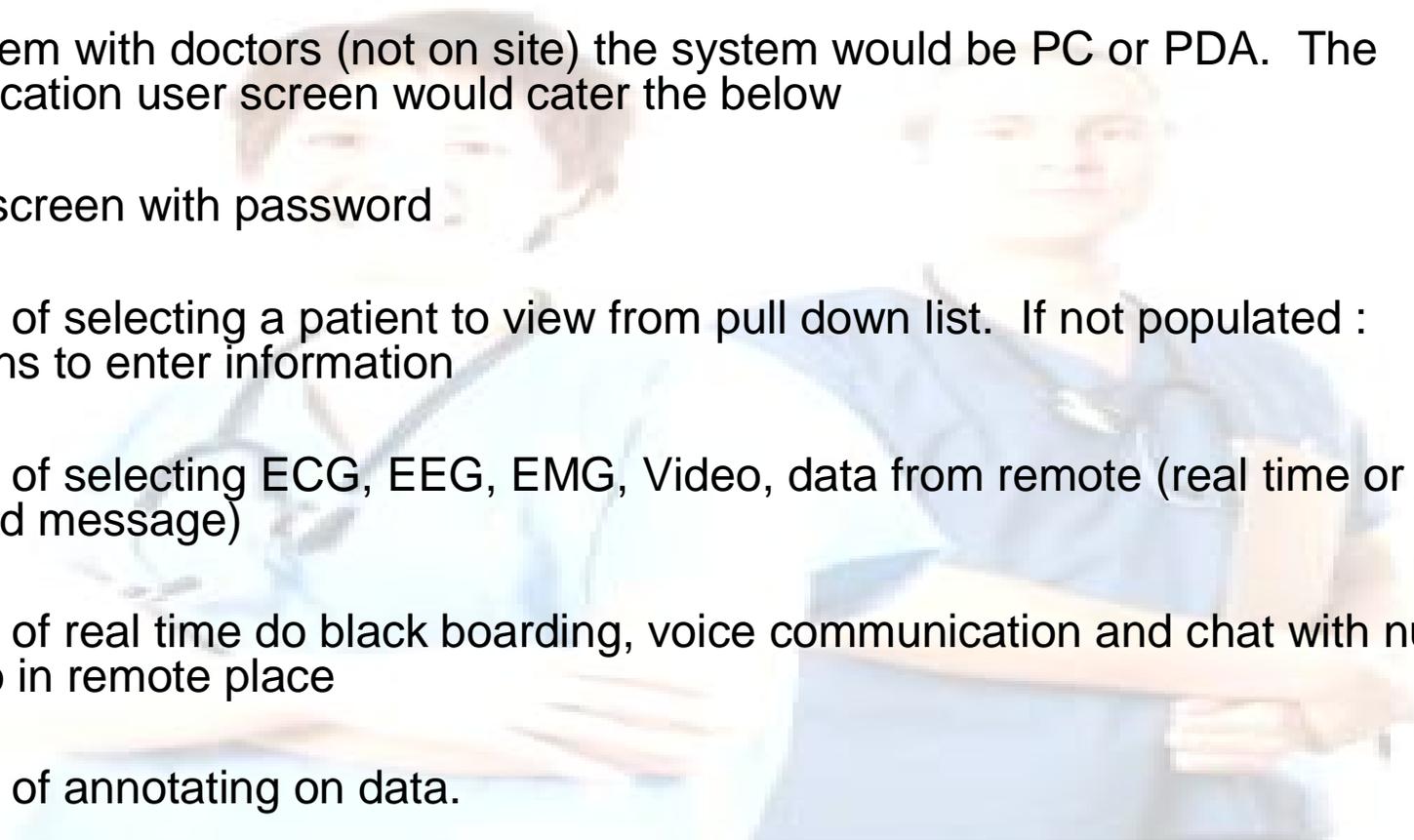
B. What do they have now
STOVE PIPED WITH NO COLLOBRATION WITH OFFSITE DOCTORS

EMG

ECG

EEG
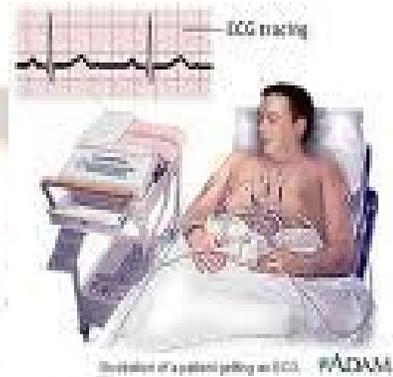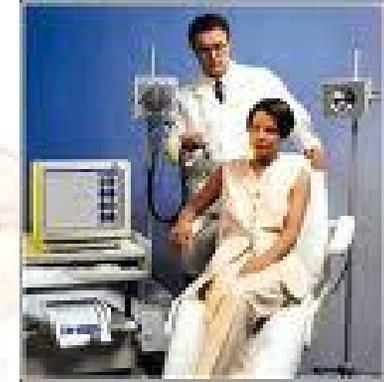
SUGAR & CHOLESTEROL

DIGITAL WEIGHT

BLOOD PRESSURE

B. Drawbacks

-Dedicated system for ECG, EEG, EMG & peripherals ➡️ Multiple copies of readouts for heart, brain and muscle

-No integrated video, voice, and black-boarding with annotations ➡️ Reduces efficiency and increases note taking time

-Large form factor and expensive ➡️ Not affordable in senior homes, off-shore such as ships, ambulatory and first response

-No real time information sharing with off-site doctors or specialists ➡️ Increase in wait and diagnostics time