eHealth Asia 2015
ICT for Post 2015 Health Challenges

Grass root Level Health Worker Attitude towards ICT

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Grass Root Level Health Worker

- Is the health worker mostly active in field
- Has the most contact with the public
- Collect majority of the public health data
- Maintains large number of records
- Collect data for different programmes with duplication at times
- Use conventional data collection, report generation and transmitting methods
- MCH sector this is public health midwife

Software Solution

- District Level Nutrition Information System
- Records real time nutrition related parameters and track malnourished children
- Multi sector involvement
- Developed on FOSS DHIS 2 with mobile support
- Anthropometric measures and nutrition related parameters to be entered by grass root level health worker

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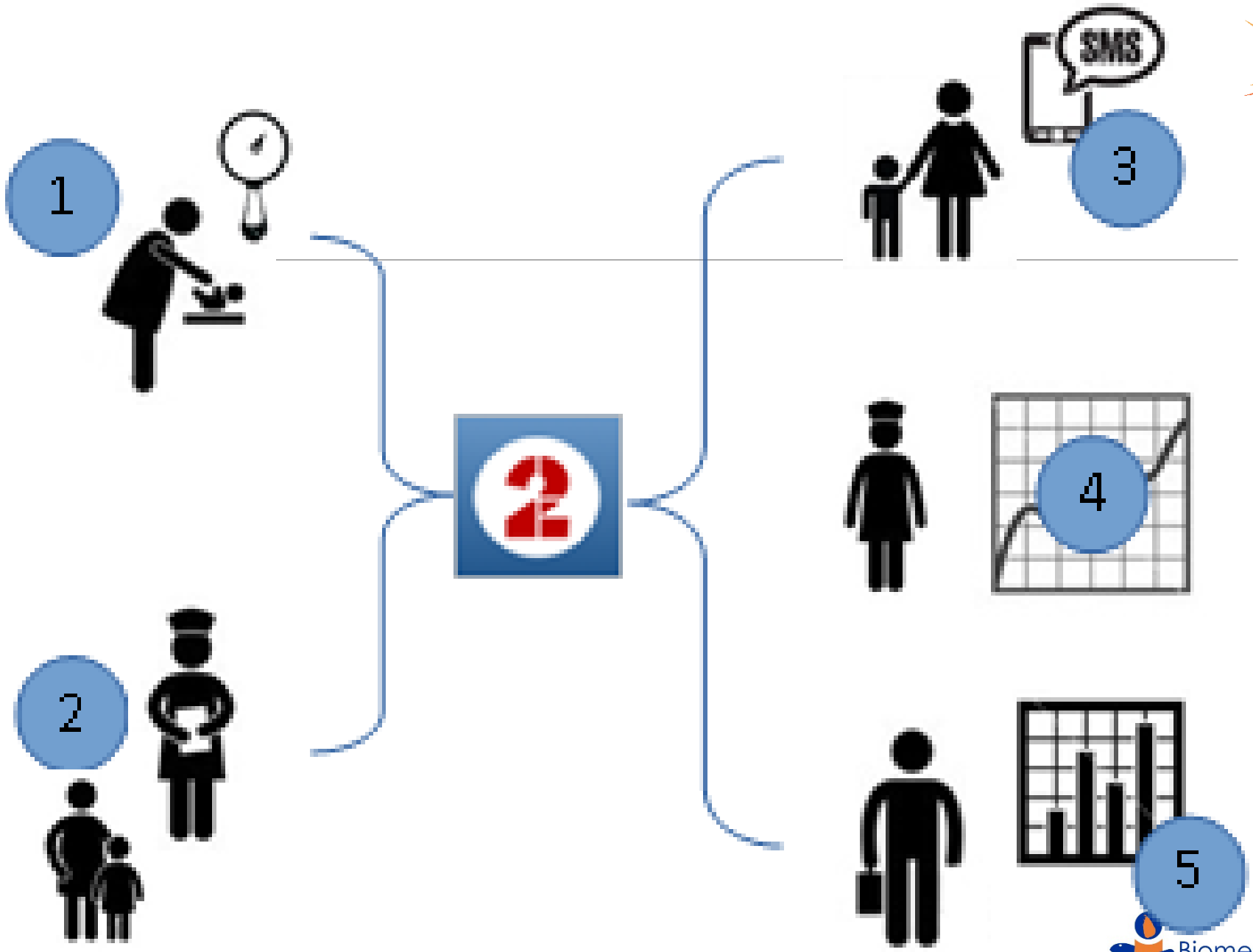
Requirements

A system

- Which can track individual child and corresponding record
- Stakeholders at different hierarchical level can log on with access control
- Which has a simple, customizable data entry forms
- Data collected on individual child should be linked with personal records of corresponding entity

Requirements cont…

- Administrative/ health care personnel be able to contact individual child/guardian conveniently through system
- Should be able to enroll children into the program at any time and suspended/reactivated in future
- Report generation at regular interval
- Reports to be viewed by relevant parties with authorization
- Current nutritional status of the child to be viewed as color coded



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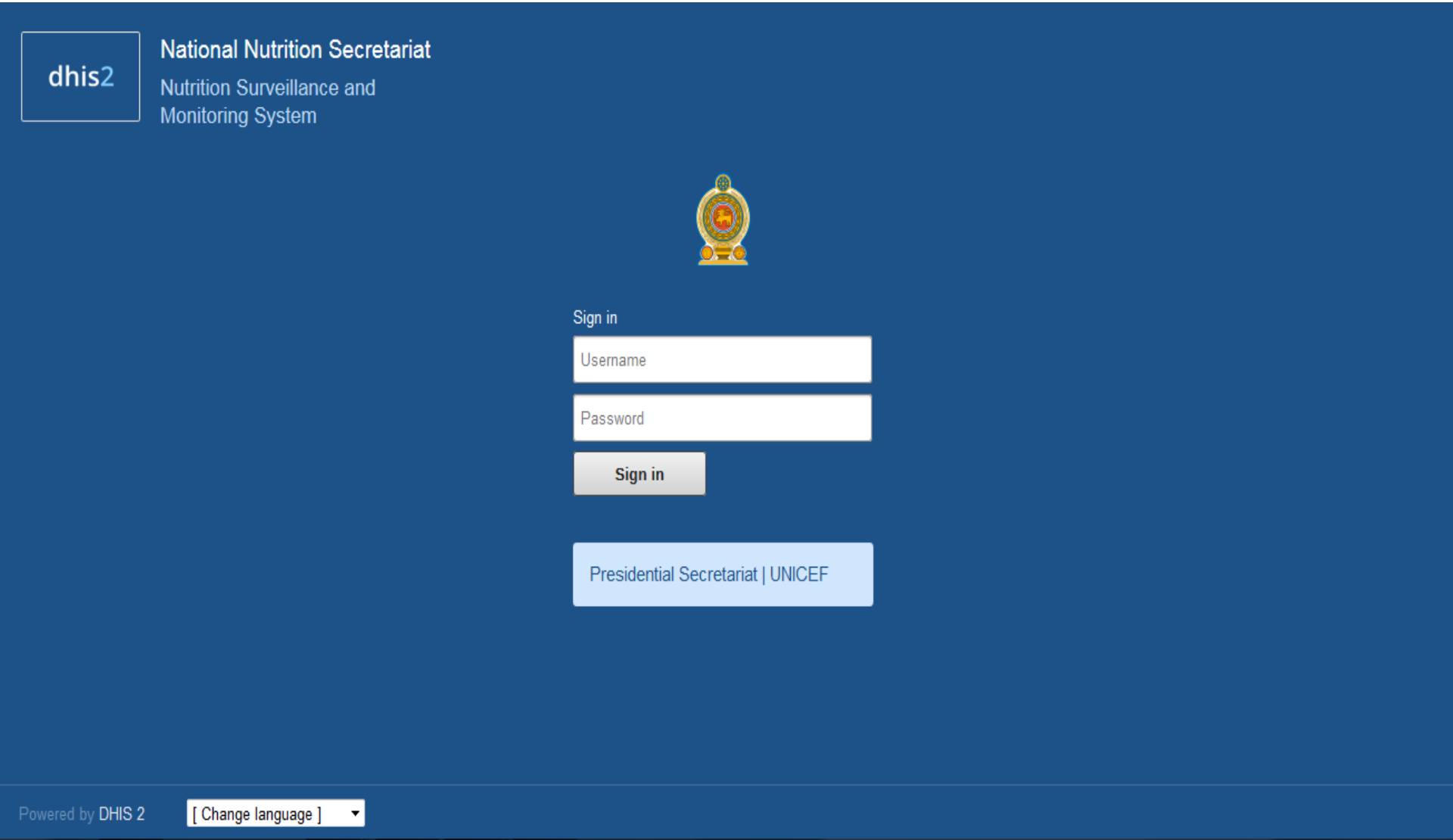
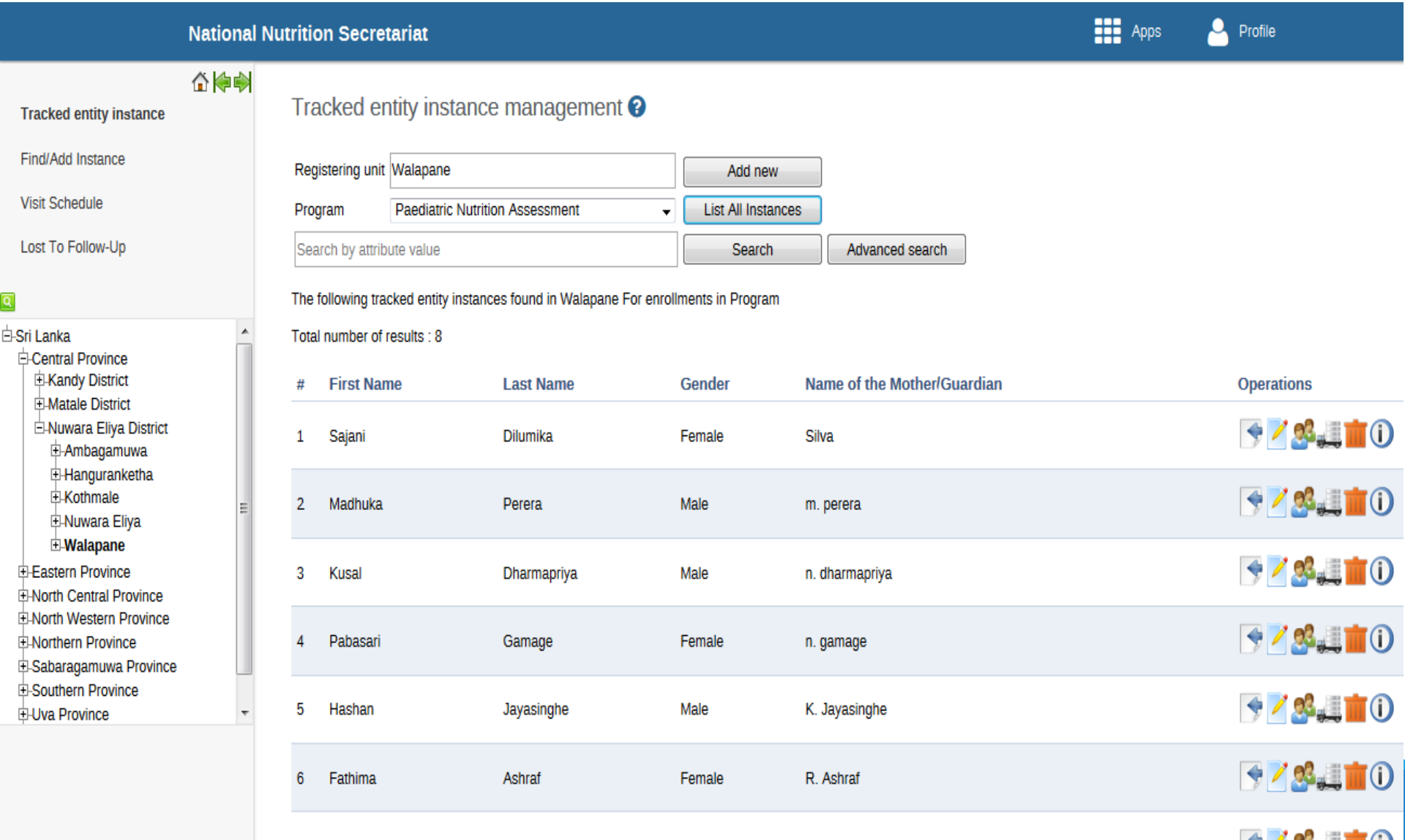
Login Page


dhis2
National Nutrition Secretariat
Nutrition Surveillance and
Monitoring System
Sign in
Username
Password
Sign in
Presidential Secretariat | UNICEF
Powered by DHIS 2
[Change language]

List of Tracked Entities



Data Entry Form

Tracked entity instance profile • Edit profile • Change location	
Location	Walapane
Date of Birth	2012-08-14
First Name	Sajani
Gender	Female
Last Name	Dilumika

Active programs • Completed programs • Enroll

- Paediatric Nutrition Assessment (2014-09-20)
  - Nutrition Assessment (2014-10-17)
- Underlying Risk Assessment (2014-10-03)
  - Underlying Risk Assessment (2014-10-03)

Relationships • Add relative • Add Brother/Sister

Data entry screen | Attributes | Reschedule and set status | Messages | Program report

What do colors mean?

Walapane	Walapane	Walapane	Walapane
Nutrition Assessment 2014-08-13	Nutrition Assessment 2014-09-02	Nutrition Assessment 2014-09-17	Nutrition Assessment 2014-10-28

Nutrition Assessment * 2014-10-28 Due date 2014-10-17

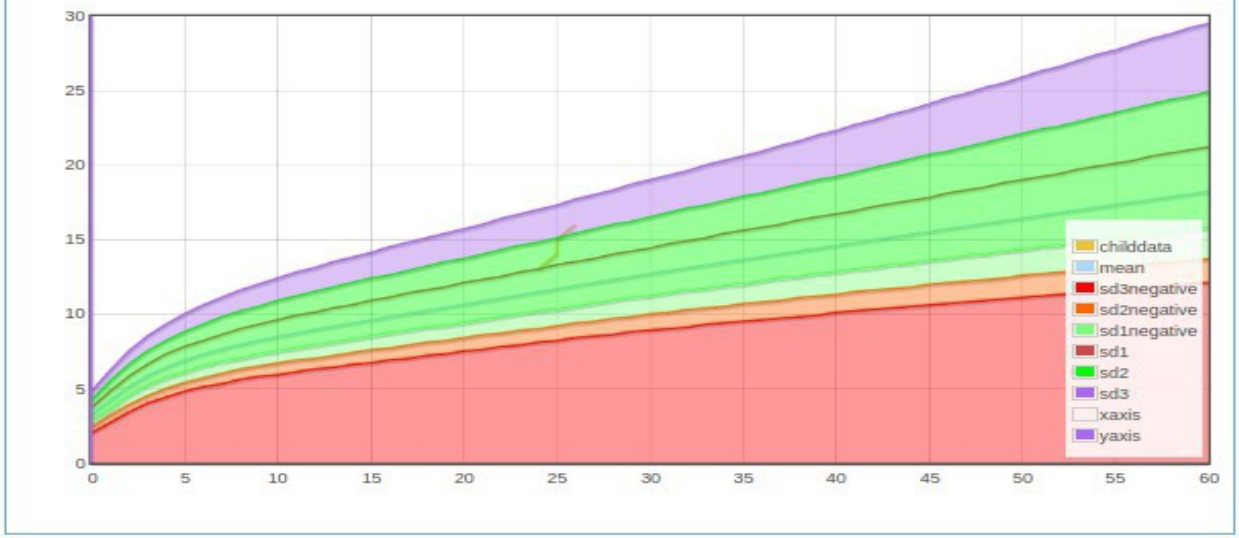
Age at current Nutrition Assessment (months): 26

Height of the child (cm): 91

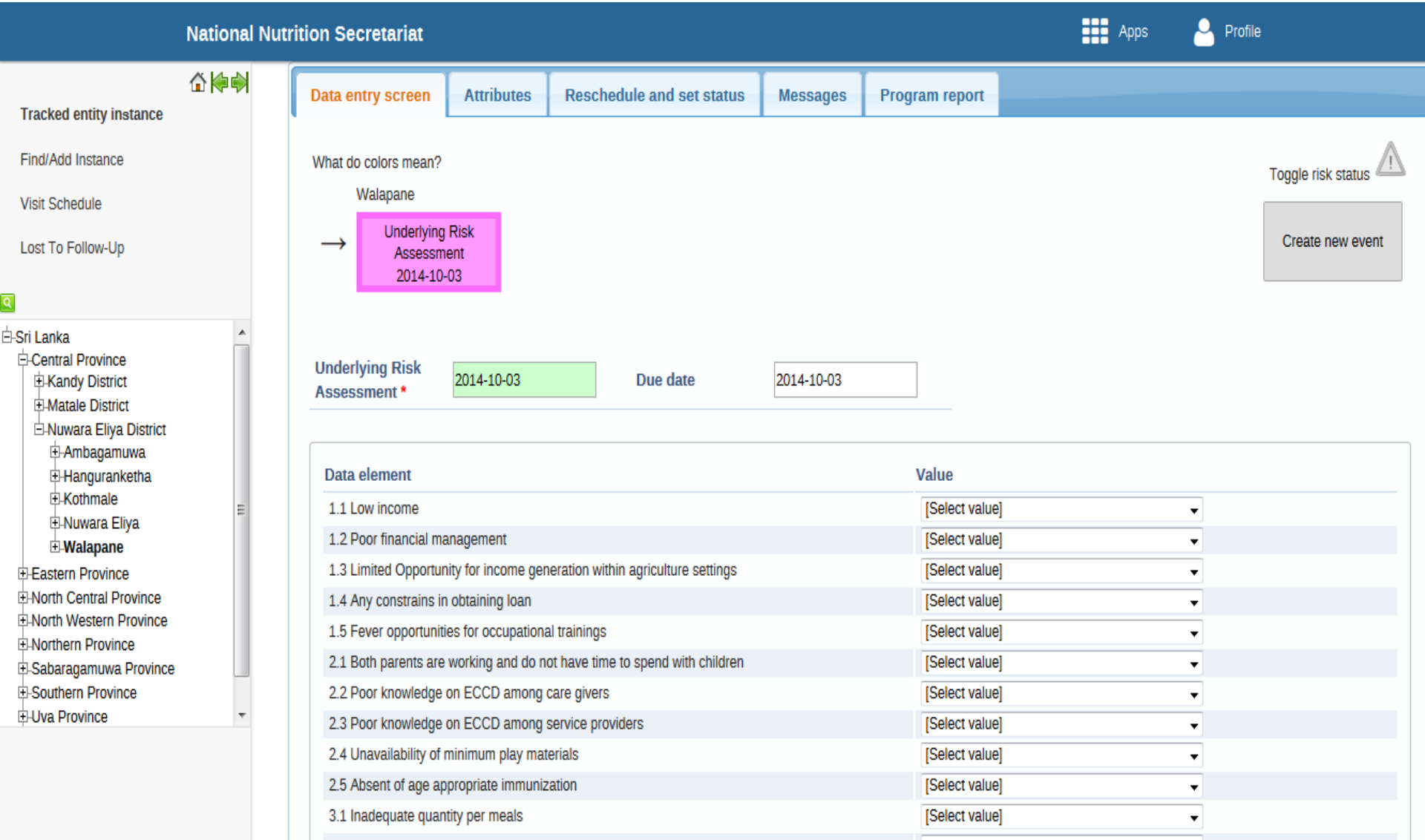
Weight of the child (kg): 16

Body Mass Index: 19.32

Weight-for-Age | Height-for-Age | Weight-for-Height | BMI-for-Age



Risk Assessment



Implementation & Training

- Selected a MOH area in Colombo District
- Piloting of Web based software solution
- 4 sessions of training sessions by an expert
- Trained around 18 PHMs
- Multiple training by peers
- Entered data in to information system

The Training

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The Sample

18 PHMs participated

- Age 26 - 52
- IT proficiency : minimal to moderate
- Use and possession of PC, smart phone : none to moderate use
- Support for training : none to moderate

Attitude to ICT

- Assessed during and after the training and data entry
- Used Qualitative methods
  - Observations
    - Review of entered data
  - Focus group discussions

Observations

Observed,

- Participation for training sessions
- Use of Information System
- Use of computers and other ICT devices

Observations

- They were keen to participate in training sessions
- Keen on learning from co-workers
- Enthusiastic in using computers
- Engaged with information system positively

Review of Entered Data

- Records of around 100 children with nutritional deficiencies entered in to system
- The data was analysed for accuracy, timeliness and other data quality measures
- In a scale of

  mild-fair-moderate-good-excellent

  They could be placed at “good” in terms of quality of data entry

Focus Group Discussions

- About 6 PHMs per group
- 3 groups
- Discussion lasting 45 – 90 mins
- Active participation from all members of the group

Existing Paper Based System

Issues/ Challenges

- Time consuming
- Duplicate data collection for multiple programmes
- Chances of loss of data
- Errors during manual data handling/ calculations
- Data archiving and retrieval problems
- Little feedback to health workers engaged in data entry

Existing Paper Based System

Positives

- Well tested
- They are used to it
- Limited access to health data by unauthorized personnel

General Attitude to ICT

- They believed it's the way forward
- They accept the change of society with ICT
- Makes life easier and efficient
- Do not believe that their profession should be left out of the revolution

General Attitude to ICT

Challenges

- Poor/limited knowledge and exposure to ICT
- Inhibition to use ICT
- Limited support and training

ICT for Health

- They accept health sector should enter the digital era
- Health system would be more efficient with ICT
- Useful and timely for their routine work at suburban area
- Would bring more recognition/ value addition and job satisfaction

ICT for Health

Challenges

- Health data is critical
- Issues related to privacy and confidentiality
- Poor IT knowledge among health workers
- Wide range of age among health workers and associated knowledge and exposure to ICT
- Inhibition from other categories of health workers

Proposed Software Solution

- User friendly interfaces
- Need training and repeated data entry to use software efficiently and accurately
- They prefer interfaces to be in both English, Sinhala
- Limited computers for data entry was an issue
- Number of training programmes and access to resources were limited
- Inspiring to use ICT

Mobile Solution

- Ideal for field data entry
- Diverse usage including health promotion, health education
- More recognition to profession at society
- Chances of damaging the mobile device during field work is a concern
- Getting accustomed to using a mobile device is a challenge
- Prefers to have one mobile device for personal communications and Professional work (+/- Dual SIM)

Training

- Believed that training is a crucial part of use and implementation of a solution
- Received adequate training from the expert
- Preferred to have more hands on training
- Managing time for training during working hours is a challenge

Conclusion

- Grass root level health care workers are welcoming to introduction of ICT in to public health domain
- Positive to adapt to ICT solutions
- They are aware of personal capacity and enthusiastic to learn and improve skills
- Review of entered data suggest satisfactory performance following basic training

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