

Appendix

Appendix 1

Fifty-eight-item competency-based self-assessment questionnaire for community-based teaching of medical undergraduate students

Dear Student,

For each of the items listed under the various domains please choose an option from those listed against each of the items. We request you to leave no missing columns and share specific reason if you choose not to rate any particular item. Each item has a maximum score of 5 and a minimum score of 1. Interpretation of the options for each item is as follows:

- Do not know: I have no knowledge
- Know: I have knowledge; but do not know how to use the knowledge
- Know how: I know how to use the knowledge
- Show how: I am confident that I can perform in a simulated environment (based on my knowledge), say in classroom practical or simulated settings
- Do: I can independently in the complex situation of an everyday context; and am able to conduct this competence in a complex everyday situation.

Rate yourself under the following competencies mentioned below:

(Tick in the appropriate box).

I. Public health - epidemiology and research methodology

| Serial number | Item | Do not know | Know | Know how | Show how | Do |
|---------------|---|-------------|------|----------|----------|----|
| 1 | Frame a research question for a cross-sectional study | | | | | |
| 2 | Choose an appropriate study design to answer your research question | | | | | |
| 3 | Design a pro forma/questionnaire to collect data for your research | | | | | |
| 4 | Calculate sample size for a prevalence study | | | | | |
| 5 | Perform probability sampling methods and recruit a sample | | | | | |
| 6 | Classify services delivered at your PHC under different levels of prevention | | | | | |
| 7 | Classify services delivered at your PHC under different modes of intervention | | | | | |
| 8 | Presentation of research results | | | | | |

II. Public health - biostatistics

| Serial number | Item | Do not know | Know | Know how | Show how | Do |
|---------------|--|-------------|------|----------|----------|----|
| 1 | Classify variables | | | | | |
| 2 | Calculate measures of central tendency | | | | | |
| 3 | Calculate measures of dispersion | | | | | |
| 4 | Interpret Z-scores in the WHO growth charts | | | | | |
| 5 | Clinical and statistical significance of research findings | | | | | |

III. Public Health Administration at primary health care level

| Serial number | Item | Do not know | Know | Know how | Show how | Do |
|---------------|---|-------------|------|----------|----------|----|
| 1 | Supervision of PHC staff | | | | | |
| 2 | Maintenance of cold chain in PHC | | | | | |
| 3 | Knowledge of registers maintained at PHC | | | | | |
| 4 | Preparing monthly reports generated from PHC | | | | | |
| 5 | Calculate vital rates of your PHC population-birth/death rates etc. | | | | | |
| 6 | Conducting PHC monthly meetings | | | | | |
| 7 | Implementation of national health programs such as RNTCP and NVBDCP at your PHC | | | | | |
| 8 | Lead a team of health-care professionals | | | | | |
| 9 | Calculate vaccine requirement for a PHC for a year | | | | | |
| 10 | Calculate IFA requirement for a PHC for a year | | | | | |
| 11 | Interpret an IDSP report of a PHC-S, P and L forms | | | | | |

IV. Family medicine

As a PHC medical officer also plays the role of a family doctor. How would do you rate your ability to provide preventive and primary healthcare for the following diseases at PHC level.

| Serial number | Item | Do not know | Know | Know how | Show how | Do |
|---------------|--|-------------|------|----------|----------|----|
| 1 | Management of under-five year children | | | | | |
| 2 | Antenatal case | | | | | |
| 3 | Postnatal mother | | | | | |
| 4 | Normal newborn | | | | | |
| 5 | Tuberculosis | | | | | |
| 6 | Diabetes mellitus | | | | | |
| 7 | Hypertension | | | | | |
| 8 | Anemia | | | | | |
| 9 | Adult with fever | | | | | |
| 10 | Adult with acute respiratory infection | | | | | |
| 11 | RTI/STI | | | | | |
| 12 | Scabies | | | | | |
| 13 | Adult with diarrhea/dysentery | | | | | |
| 14 | Screening for noncommunicable diseases | | | | | |
| 15 | Contraception advice/prescription | | | | | |
| 16 | Immunization advice/prescription | | | | | |
| 17 | Breastfeeding counseling | | | | | |
| 18 | Preparation of thick and thin blood smears for malaria | | | | | |
| 19 | Reporting of sputum AFB smears | | | | | |
| 20 | Perform minor procedures such as incision and drainage/dressing/suturing | | | | | |
| 21 | Conduct of spontaneous vaginal delivery of pregnant women who are not high risk | | | | | |
| 22 | Primary health care in emergency including cardio-pulmonary resuscitation in adult | | | | | |

V. Cultural competencies

| Serial number | Item | Do not know | Know | Know how | Show how | Do |
|---------------|---|-------------|------|----------|----------|----|
| 1 | Interpret how social and cultural factors affect health in your area | | | | | |
| 2 | Design different interventions for different population with creativity and flexibility | | | | | |
| 3 | Communicate with people of a different cultural background | | | | | |

VI. Generic competence

| Serial number | Item | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree |
|---------------|--|----------------|-------|----------------------------|----------|-------------------|
| 1 | I can communicate effectively with patients | | | | | |
| 2 | I am not approachable to community members | | | | | |
| 3 | I can communicate with peers with ease | | | | | |
| 4 | I feel uncomfortable/apprehensive when communicating with program managers/policy makers | | | | | |
| 5 | I can individually handle operational problems in my PHC | | | | | |
| 6 | I will have to always consult others for any decision related to patient care | | | | | |
| 7 | I am not creative and prefer to follow the usual ways | | | | | |
| 8 | I can critically analyze my skills as a primary care physician | | | | | |
| 9 | I can innovatively use available technology for better health-care delivery | | | | | |