



अखिल भारतीय आयुर्विज्ञान संस्थान, नागपुर

ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NAGPUR

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File No. AIIMS-NAG/PROC/Cent-Store/24-25/09/NIQ/10

Dt. 3.1./08/2024

NOTICE INVITING QUOTATIONS

The Executive Director, All India Institute of Medical Sciences, Nagpur invites quotations from the reputed supplier on their letter head for Customized Charts for the departmental museum of Community Medicine of AIIMS Nagpur mentioning the rate in following format:

Sr. No	Item Description	QTY	Unit Cost	Total Cost	GST %	Total Cost with GST
1	Customized Charts. Size:- 20"*26", Laminated & Mounted Frame on Board. Detailed specification: 1. Base: Vinyl 2. Printing type: Photo Print 3. Base for the pasting printed media: MDF/Foam sheet 4. Framing type: Wooden Frame 5. Mounting Type: Hanging Hooks on top of the Board. (Name of the charts and sample are attached)	25				

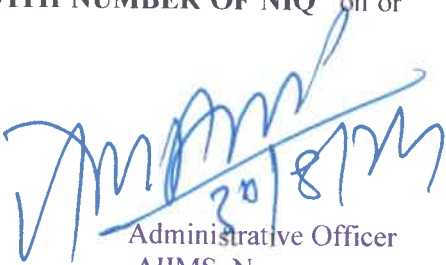
Note:

- Common rate for all type of charts to be quoted in single row.
- A compiled statement of technical specification need to be submitted along with quotation.

TERMS OF CONDITIONS:

- 1) All quotations to be submitted in the name of **Executive Director, AIIMS Nagpur** only. Quotations not submitted on letter head of vendor duly signed and stamped and not addressed to Executive Director, AIIMS, Nagpur will be rejected summarily.
- 2) Copy of NIQ duly signed and stamped by the vendor to be submitted along with quotation by accepting all the terms and conditions of NIQ.
- 3) Rates of articles should be quoted per unit item without including GST.
- 4) Taxes leviable should be quoted separately.
- 5) **A declaration by vendor is required to be submitted along with quotation stating that vendor is not debarred by Department of Commerce or Ministry/ Department concerned. The date of declaration should not be before the date of NIQ and after the last date of submission of quotation.**
- 6) Delivery Period: - Within 30 days from the date of supply order.
- 7) Delivery should be FOR O/o Central Store, AIIMS, Nagpur.
- 8) **Liquidated Damages Charge:** - In the event of the Seller's failure supply, Liquidated Damages charges will be deducted to the sum of 0.5% of the contract price of the delayed/undelivered, stores/services mentioned above for every week of delay or part thereof a week, subject to the maximum value of the Liquidated Damages being not higher that 10% of the value of delayed stores.
- 9) Payment will be released on inspection of supplied material found satisfactory by the concerned department as regard to quality, quantity etc. Broken articles will have to be replaced before payment.
- 10) Bank details such as Account Number, IFSC Code etc. should be furnished so as to facilitate payment on line, if any.
- 11) Interested parties should submit their quotations in **sealed envelope in store office, super scribing "QUOTATION FOR SUPPLY OF CUSTOMIZED CHARTS FOR THE DEPARTMENTAL MUSEUM OF COMMUNITY MEDICINE OF AIIMS NAGPUR WITH NUMBER OF NIQ"** on or before 06/09/2024
- 12) Rights to accept/reject any quotation rests with the AIIMS Nagpur.




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AIIMS, Nagpur
Rohan L. Bagde
Administrative Officer
AIIMS, Nagpur

Sr.no	Charts Name
1	James Lind (1716-1794)
2	Edward Jenner (1749-1823)
3	Sir Edwin Chadwick (1800-1890)
4	John Snow (1813-1858)
5	Ignaz Semmelweis (1818-1865)
6	Louis Pasteur (1822-1895)
7	Heinrich Hermann Robert Koch (1843-1910)
8	Dilip Mahalanabis (1934-2022)
9	Sunithi Solomon (1939-2015)
10	Black Death (1346-1353)
11	Quarantine And Isolation
12	Spanish Influenza (1918-1920)
13	1925 Serum run to Nome
14	Web of Causation
15	Types of screening
16	Validity and Reliability
17	Measures of validity
18	Model for Early Disease Detection Programmes
19	HADDON MATRIX- RTA
20	Sustainable Developmental Goals (SDG)
21	Rule of Halves- Hypertension in Community
22	Tracking of blood pressure
23	NHM Infrastructure
24	Milestones in Public Health Evolution

25. Clinical Breast Examination



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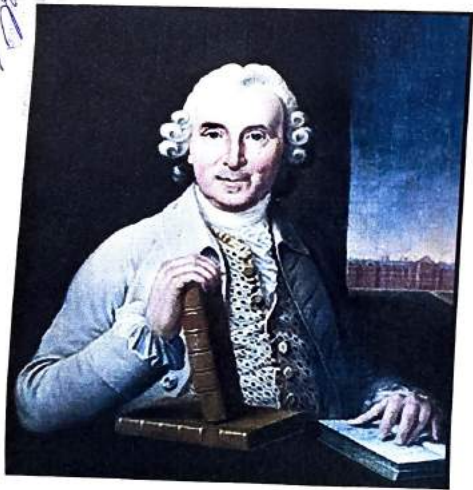
Museum Charts



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James Lind (1716-1794)



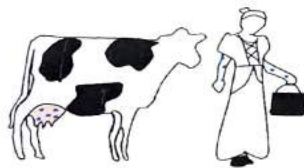
- Scottish Physician
- Pioneer of Naval Hygiene
- First Clinical Trial
- Citrus Fruits in curing Scurvy
- Distillation of seawater into potable water

Edward Jenner (1749-1823)

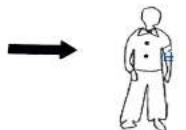

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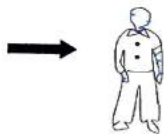
- English Physician
- Father of Immunology
- Pioneer of Smallpox Vaccine
- 14th May, 1796- 8 year old James Phipps was the first to receive vaccine.



Sarah Nelmes, a milkmaid infected with cowpox.



James Phipps is inoculated with cowpox pus from Nelmes.



Phipps falls ill with a mild case of cowpox.



Scabs are collected from a smallpox patient.



Phipps is inoculated with the scabs of smallpox.



Phipps is unaffected. Protection is complete.

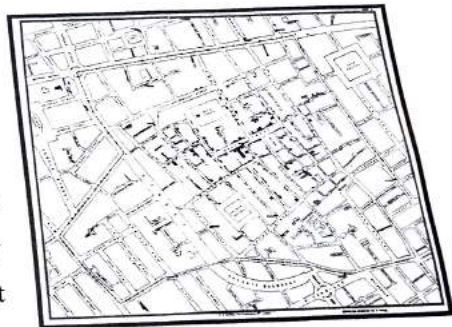
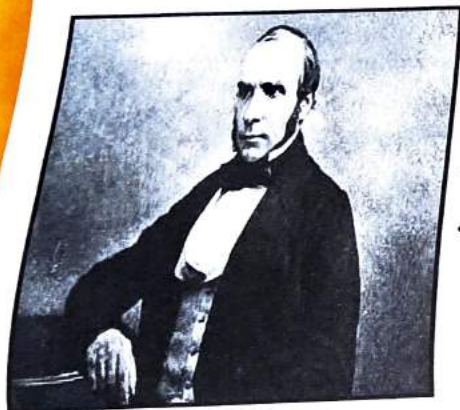
Sir Edwin Chadwick (1800-1890)



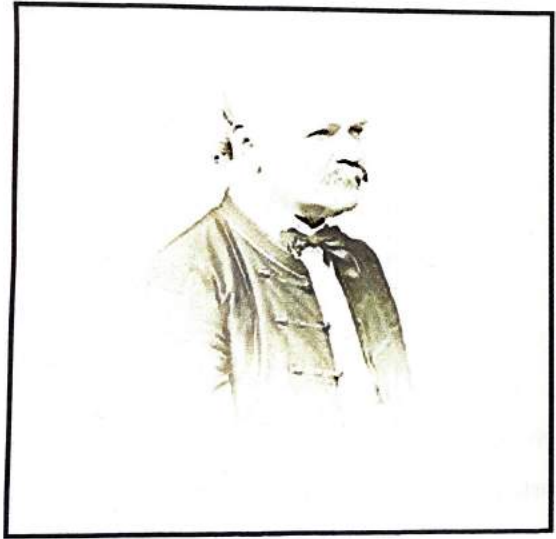
- English Social Reformer
- Established link between poor sanitation and outbreaks of disease in urban environments
- Major reforms in urban sanitation and public health (Public Health Act 1848).
- Creation of a General Board of Health, with Chadwick being made a Commissioner.
- When cholera struck London, responded with the emergency measures of waste removal and street cleaning
- Pioneer of scientific surveys and inspections

John Snow (1813-1858)

- English Physician
- Father of Epidemiology
- Natural Experiment on Cholera and Spot Map of Cholera
- Changes in water and sanitation system of London
- Paved way for shoe-leather epidemiology same as field epidemiology or intervention epidemiology imply investigations initiated in response to urgent public health problems and for which the investigative team does much of its work in the field



Ignaz Semmelweis (1818-1865)



- Hungarian Physician
- Semmelweis established a strong, specific, temporal causal association between unclean hands and puerperal fever.
- He enforced a hand-washing policy for physicians
- Father of infection control and Father of Hand hygiene.
- Early pioneer of Antiseptic Procedures in reducing maternal mortality
- Handwashing techniques and chlorinated disinfectants

Louis Pasteur (1822-1895)



- French chemist, pharmacist and microbiologist.
- Discovered the principles of principles of vaccination, microbial fermentation, and Pasteurization (preservation of milk)
- Father of Bacteriology
- Vaccines of Anthrax and Rabies

Source: Adam, P. (1951). "Louis Pasteur: Father of Bacteriology." Canadian Journal of Medical Technology, 13 (3): 126-128. PMID: 14870004

Heinrich Hermann Robert Koch (1843-1910)



- German Microbiologist
- Discoverer of the specific causative agents of tuberculosis, cholera and anthrax
- Koch's Postulates
- Germ Theory of Disease
- Nobel Prize in Physiology or Medicine 1905

Dilip Mahalanabis (1934-2022)



The mortality rate was 3.6 percent among those given ORT, compared with 30 percent in those given IV fluid therapy.

- Indian pediatrician
- Pioneer in using Oral Rehydration Therapy to treat diarrheal disease
- Role in Post-Bangladesh War of Independence (1971)
- Started Campaign which led to WHO policy to treat dehydration.



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Sunithi Solomon (1939-2015)



Key role in alerting India to the threat of the HIV/AIDS epidemic

- Indian Microbiologist
- Discovered the first case of HIV in India
- Established one of India's first voluntary HIV counseling and testing facilities treating more than 20000 patients
- Educated other doctors that HIV was not a fatal disease and could be treated

Black Death (1346-1353)


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- Bubonic Plague Pandemic in Europe
- 2nd Great Plague Pandemic
- One of the most fatal pandemic in human history about 25 million people are estimated to have died in Europe from the plague between 1347 and 1351

Paul Fürst, engraving (coloured), c. 1656, of a plague doctor of Marseilles (introduced as 'Dr Beaky of Rome'). His nose-case is filled with herbal material to ward off the plague.!

Lawton, Graham (25 May 2022). [Wilson, Emily \(ed.\). "Plague: Black death bacteria persists and could cause a pandemic". New Scientist. London. ISSN 0262-1079.](#)



For people who are not sick, but may have been exposed, quarantine:

Quarantine And Isolation

- **Quarantine** separates and restricts the movement of people who were exposed to a contagious disease to see if they become sick.
- **Isolation** separates sick people with a contagious disease from people who are not sick.



For people who are sick, isolation:

Spanish Influenza (1918-1920)



Soldiers sick with Spanish flu at a hospital ward Camp Funston in Fort Riley, Kansas

- **Great Influenza epidemic** or by deadly global influenza epidemic caused by the H1N1 Influenza A virus
- The microscopic killer circled the entire globe in four months, claiming the lives of more than 21 million people.
- Introduction of 'Social Distancing' and 'wearing Masks'
- Early and sustained imposition of gathering bans, school closures, and other social-distancing measures significantly reduced mortality rates

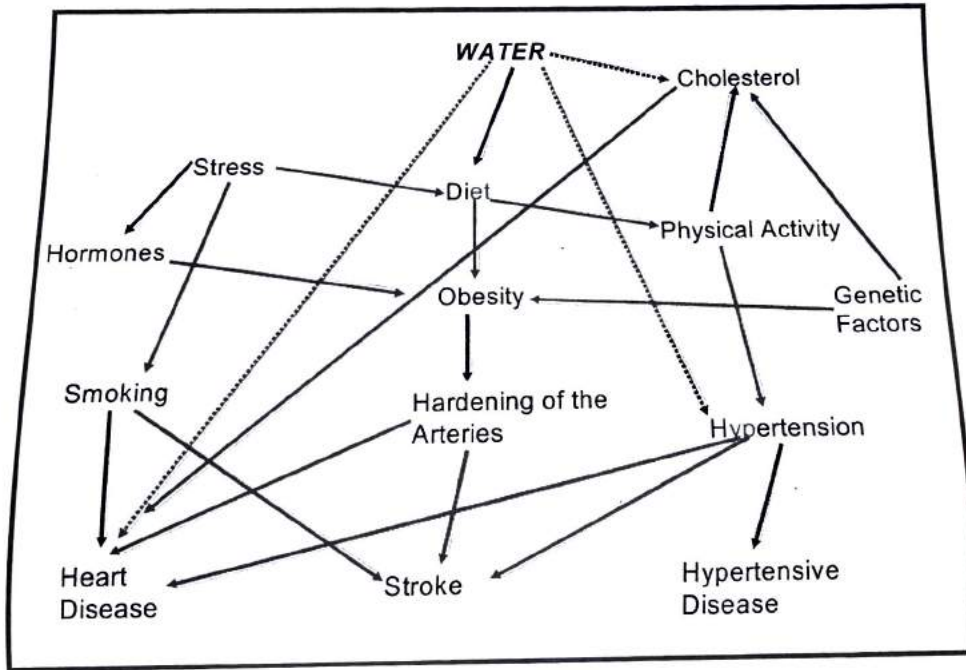
1925 Serum run to Nome



Leonhard Seppala with his dogs after the serum run in 1925. His lead dog, Togo, on the far left.

- The Serum Run (The Great Race of Mercy)
- Transport of Diphtheria antitoxin to tackle Diphtheria epidemic in town of Nome
- Dog-sled relay across the U.S Territory of Alaska
- 20 Mushers and about 150 sled dogs
- Across 1,085 km in 5.5 days

Web of Causation



Calderon, R. & Hunter, Paul. (2009). Epidemiological studies and the association of cardiovascular disease risks with water hardness. Calcium and Magnesium in Drinking-water. 110.


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Types of screening

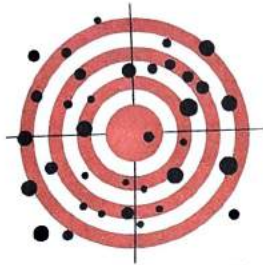


Mass screening	Whole population or a sub-group e.g.: eye camp
High-risk screening	Only high-risk groups to increase yield e.g.: TB in HIV, breast cancer

Validity and Reliability



Unreliable & Not Valid



Unreliable, But Valid



Reliable, Not Valid



Both Reliable & Valid

RELIABILITY

Consistent results when repeated more than once on the same individual under same conditions

VALIDITY

The extent to which the test **accurately** measures what it was supposed to measure

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Measures of validity

DIAGNOSTIC TEST

SCREENING TEST RESULTS	RESULTS	
	Diseased	Not diseased
Positive	True Positive (TP)	False Positive (FP)
Negative	False Negative (FN)	True Negative (TN)

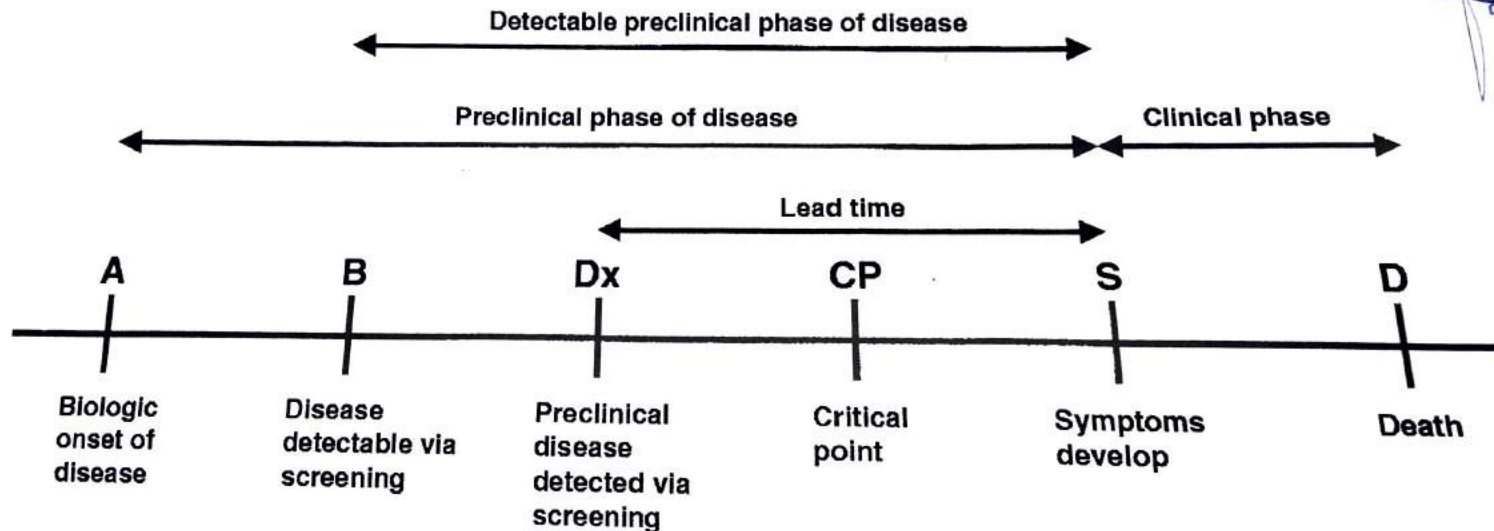
$$\text{Sensitivity} = \frac{TP}{TP + FN}$$

$$\text{Specificity} = \frac{TN}{TN + FP}$$

$$\text{Positive predictive value} = \frac{TP}{TP + FP}$$

$$\text{Negative predictive value} = \frac{TN}{TN + FN}$$

Model for Early Disease Detection Programmes



Source- Park Textbook – 27th edition page- 152

HADDON MATRIX- RTA

Phases	Personal Factors	Equipment Factors	Physical Environmental Factors	Social Environmental Factors
Pre-event	Driver skills Driver attentiveness Sobriety	Maintenance of brakes, tires, etc. Windshield cleanliness	Roadway condition Darkness or glare	Attitudes to drink driving and speeding, Use of restraints
Event	Human tolerances to crash forces Wearing of seatbelts	Vehicle crashworthiness Energy absorbing design Airbags	Presence of fixed objects near roadway Unsecured objects within the vehicle	Enforcement of mandatory seatbelt and child restraint use
Post-event	Crash victims general health status	Petrol tanks designed to minimize likelihood of post-crash fire	Availability of effective emergency response	Public support for trauma care and rehabilitation

Sustainable Developmental Goals (SDG)

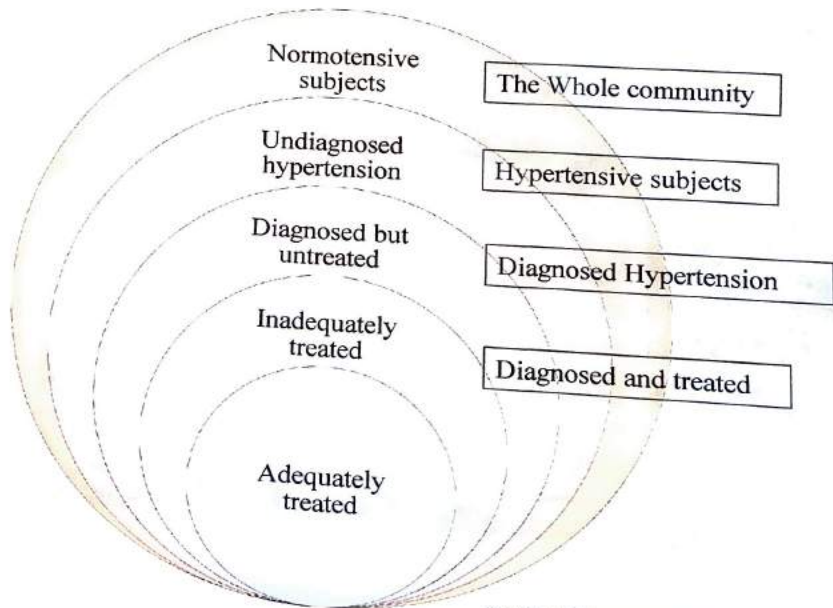


Source: <https://sdgs.un.org/goals>

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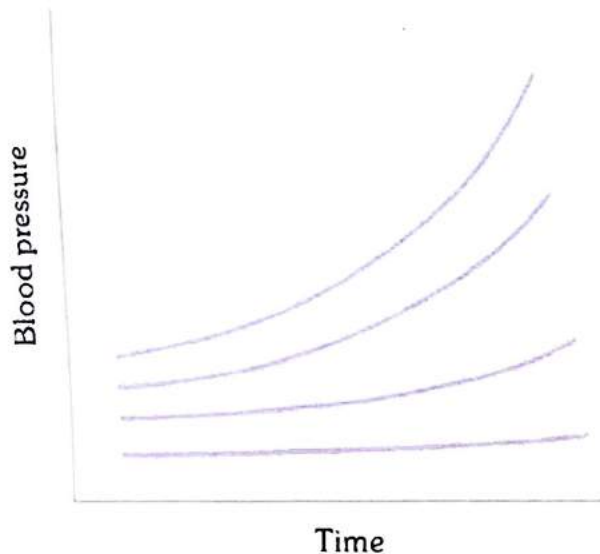
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Rule of Halves- Hypertension in Community



Tracking of blood pressure

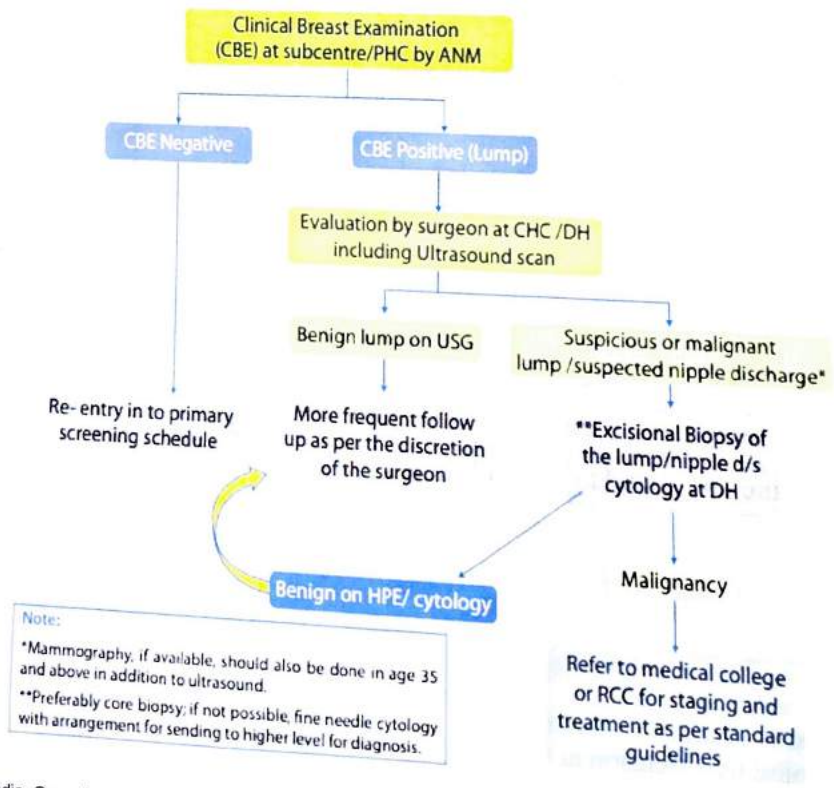
- Blood pressure levels of individuals are followed up over a period of years from early childhood into adult life.
- Individuals with high pressure, probably continue in the same “track” as adults.
- Low blood pressure levels tend to remain low.
- This phenomenon of rank order of blood pressure has been described as “tracking”.
- It can be applied to identify children and adolescents “at risk” of developing hypertension at a future date.





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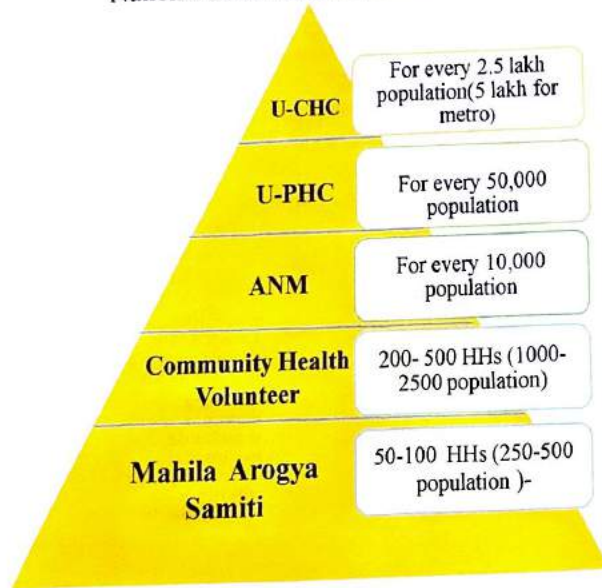
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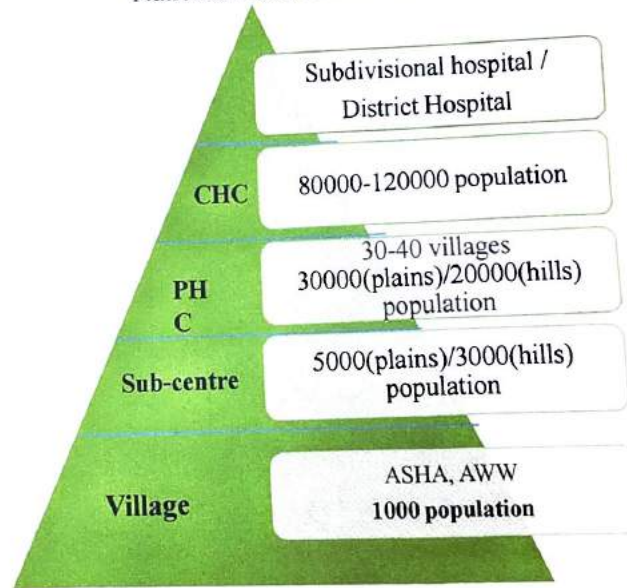
Note:
 *Mammography, if available, should also be done in age 35 and above in addition to ultrasound.
 **Preferably core biopsy; if not possible, fine needle cytology with arrangement for sending to higher level for diagnosis.

NHM Infrastructure

National Urban Health Mission



National Rural Health Mission




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Milestones in Public Health Evolution

