WHO Global Action Plan on Antimicrobial Resistance

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Five strategic objectives:

- 1. Improve awareness and understanding (WAAW)
- 2. Strengthen knowledge through surveillance & research
- 3. Reduce the incidence of infection (IPC\Sanitation)
- 4. Optimize the use of antimicrobial medicines
- 5. Ensure sustainable investment (R&D)

National Action Plans



Implementation GAP: 10 work streams

- 1. Global communications campaign
- 2. Support National Action Plans of MS
- 3. Global Antimicrobial Resistance Surv System
- 4. Support measures to improve IPC
- 5. Monitor use & enhance stewardship of antibiotic use
- 6. Encourage R and D and explore new business models
- 7. Improve Point of Care diagnostics
- 8. Address the Environmental Drivers
- 9. Vaccines to prevent AMR
- 10.One Health Liaison



1. Increase use of EXISTING vaccines

- Expanded use of <u>which</u> vaccines in <u>which</u> population would contribute the most to reduced antibiotic use.
- Eg PCV use in children:
 - 64% reduction in penecillin resistant strains (1999-2008)
 - Predict saving 11.4 million days of antibiotic use if global.
 - What about the elderly ? Where is antibiotic used the most ?
- Others ? HiB, Pertussis, influenza ?
- Need data!!
- Symptom burden X antibiotic use X pathogen causality X vaccine efficacy = ???



2. Accelerate development of low-hanging fruit

Vaccines for diseases currently treated with antibiotics

- Group A Strep
- Borrelia burgdorferi (Lyme disease)
- others
- Need evidence: is this commercially viable ? How many doses of antibiotic use would be avoided ? At what cost ?



3. Vaccines for diseases where AMR is a problem

- TB
- S. aureus
- E. coli
- C. difficile
- ... etc

