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Public Health Nursing
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Public Health Nurses Review of the Evidence Base of State Healthcare Priorities

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Learning Objectives:

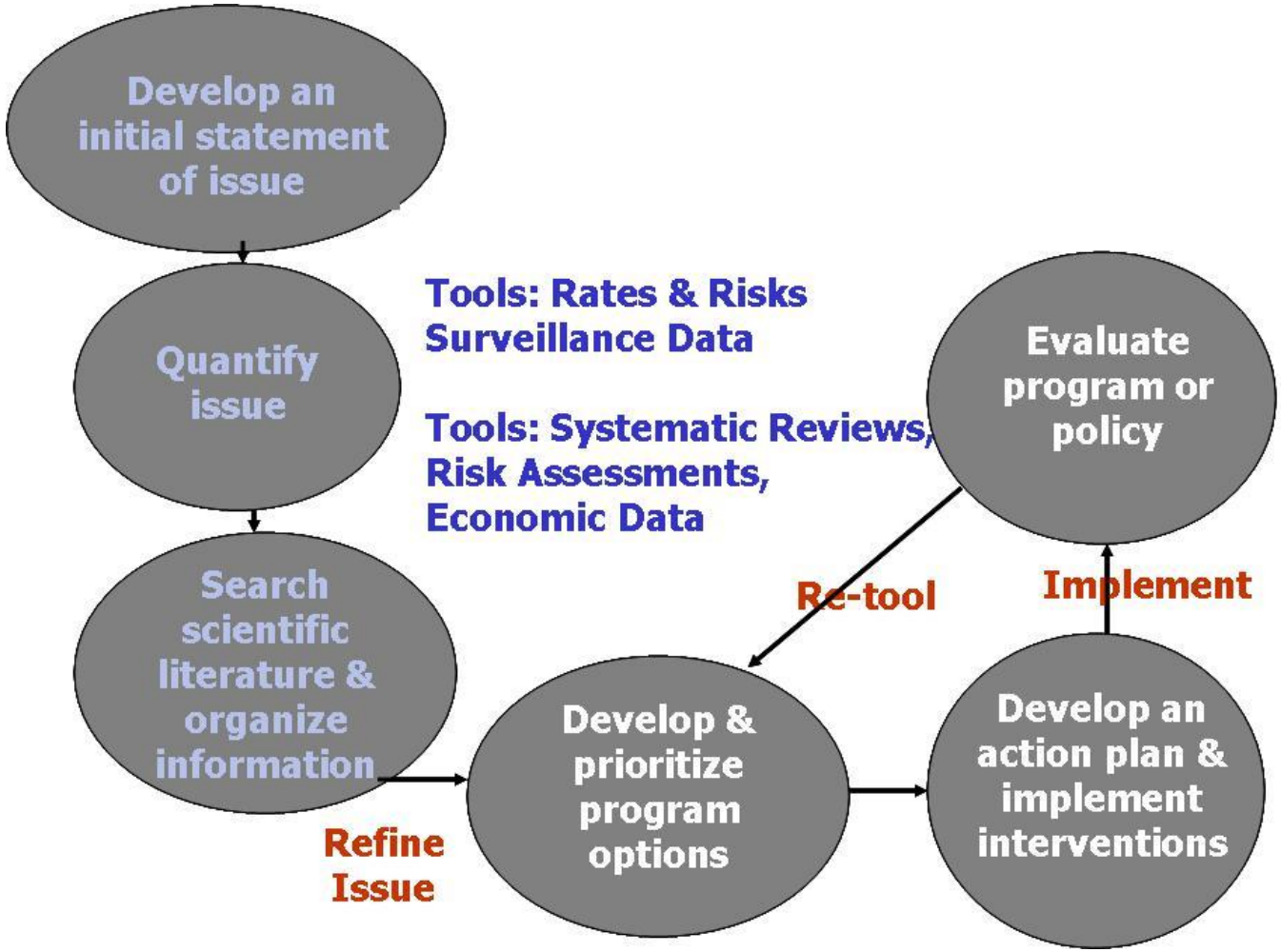
Participants will be able to:

- Describe the process a collaborative of PHNs used to identify evidence-based findings associated with state health care issues.
- Explain the outcomes of the EB collaborative & their utility for practice.
- Suggest how an EB collaborative such as the one described could be adapted to her/his environment.

Question: How do we practice within an evidence-based framework?

- Life-long, self-directed learning
- Convert info needs into answerable ?'s
- Track down best evidence to answer ?
- Critically appraise evidence for validity & utility
- Apply results
- Evaluate performance

Sequential Framework for Enhancing Evidence-based Public Health



(Brownson, et al.)

Flowchart of Evidence-based Health Care

(Adapted from Jenicek in R.C. Brownson, Evidence-Based Public Health, Oxford University Press, 2002.)

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Putting the Process into Action: A Collaborative Approach

- **Illinois Public Health Association-Nursing Section's Evidence Base Committee**
  - PHN members from academia & practice
- **University of Illinois Chicago, College of Nursing**
  - APHNE grant team members
  - UIC graduate nursing students

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Background: PHN Summit

- **Practice**
- **Policies**
- **Priorities**

Chronic disease / adult / obesity
Immunizations
Lead
Prenatal Outcomes
Sexually Transmitted Diseases

Methods

- Call to Action with IPHA Nursing Section
- Committees formed (5)
- Clinical question developed using PICO format
- Literature retrieved & reviewed
- Formatting final document: Cochrane or USPSTF
- Final review & vote of approval

Develop an Initial Statement of Issue

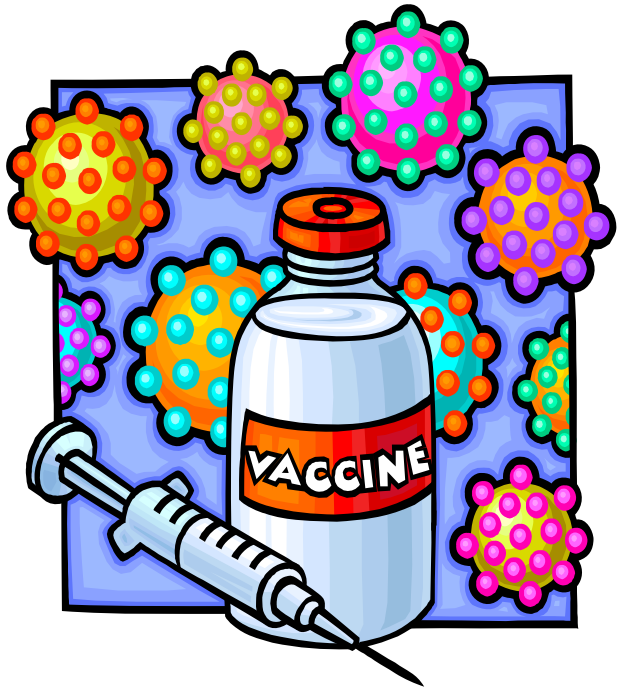
- **Persistent cervical infection with certain types of HPV = single most important risk factor for cervical cancer**
- **Many preteens, teenagers, & young adults are at risk to HPV infection & therefore cervical cancer**
- ***And* Gardasil vaccine exists to prevent most HPV infection that causes cancer**
- ***And* not many preteens & teenagers are receiving vaccine**

Quantify Issue: Prevalence

- **2003-2005: Overall HR-HPV prevalence of 23%**
- **Prevalence**
  - STD clinics: 27%
  - Family planning clinics: 26%
  - Primary care clinics: 15%
- **Prevalence by age:**
  - 14 to 19 years: 35%
  - 20 to 29 years: 29%
  - 30 to 39 years: 13%

Quantify Issue: Prevalence

- **Unable to quantify use of vaccine in research literature**
- **Local health departments report little use of limited vaccine that they have**

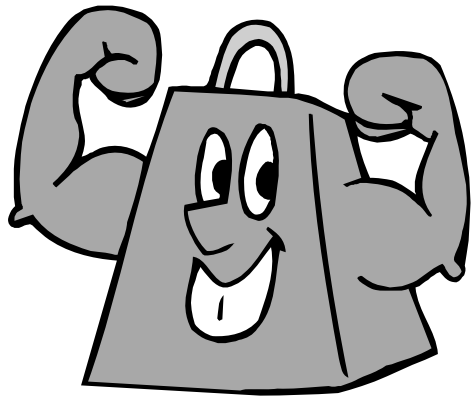


EB Question: Immunization

What educational/social marketing strategies are successful in increasing the rate of immunization with HPV vaccine in girls completing the 6th grade physical requirement?

Evidence Retrieval

- **Data Sources**
- **Articles**
- **Strength of Evidence**

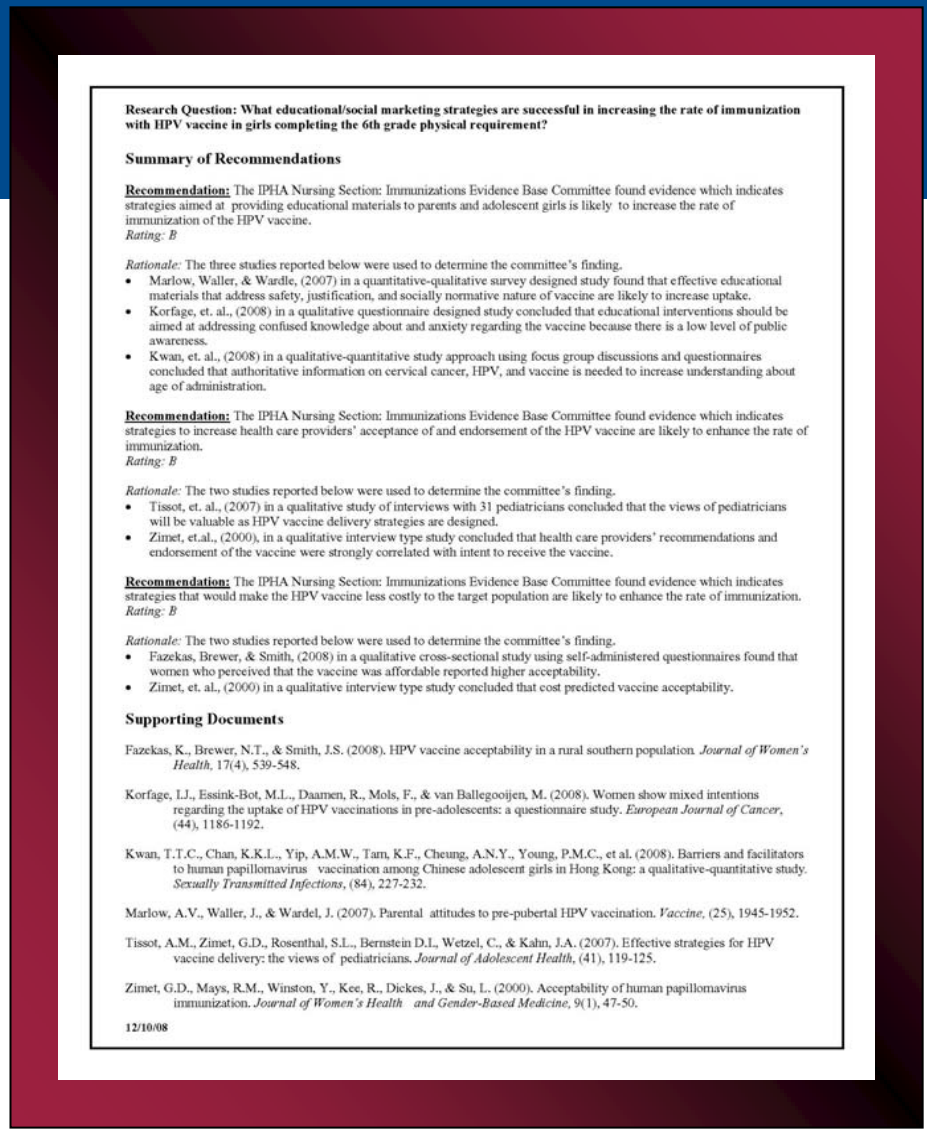


Search Scientific Literature & Quantify Information

Author & Date	Level of Evidence	Intervention	Outcome	Limitations

Results

Rating the Evidence to Determine a Recommendation



Research Question: What educational/social marketing strategies are successful in increasing the rate of immunization with HPV vaccine in girls completing the 6th grade physical requirement?

Summary of Recommendations

Recommendation: The IPHA Nursing Section: Immunizations Evidence Base Committee found evidence which indicates strategies aimed at providing educational materials to parents and adolescent girls is likely to increase the rate of immunization of the HPV vaccine.
Rating: B

Rationale: The three studies reported below were used to determine the committee's finding.
- Marlow, Waller, & Wardle, (2007) in a quantitative-qualitative survey designed study found that effective educational materials that address safety, justification, and socially normative nature of vaccine are likely to increase uptake.
- Korfage, et. al., (2008) in a qualitative questionnaire designed study concluded that educational interventions should be aimed at addressing confused knowledge about and anxiety regarding the vaccine because there is a low level of public awareness.
- Kwan, et. al., (2008) in a qualitative-quantitative study approach using focus group discussions and questionnaires concluded that authoritative information on cervical cancer, HPV, and vaccine is needed to increase understanding about age of administration.

Recommendation: The IPHA Nursing Section: Immunizations Evidence Base Committee found evidence which indicates strategies to increase health care providers' acceptance of and endorsement of the HPV vaccine are likely to enhance the rate of immunization.
Rating: B

Rationale: The two studies reported below were used to determine the committee's finding.
- Tissot, et. al., (2007) in a qualitative study of interviews with 31 pediatricians concluded that the views of pediatricians will be valuable as HPV vaccine delivery strategies are designed.
- Zimet, et.al., (2000), in a qualitative interview type study concluded that health care providers' recommendations and endorsement of the vaccine were strongly correlated with intent to receive the vaccine.

Recommendation: The IPHA Nursing Section: Immunizations Evidence Base Committee found evidence which indicates strategies that would make the HPV vaccine less costly to the target population are likely to enhance the rate of immunization.
Rating: B

Rationale: The two studies reported below were used to determine the committee's finding.
- Fazekas, Brewer, & Smith, (2008) in a qualitative cross-sectional study using self-administered questionnaires found that women who perceived that the vaccine was affordable reported higher acceptability.
- Zimet, et. al., (2000) in a qualitative interview type study concluded that cost predicted vaccine acceptability.

Supporting Documents

Fazekas, K., Brewer, N.T., & Smith, J.S. (2008). HPV vaccine acceptability in a rural southern population. *Journal of Women's Health*, 17(4), 539-548.

Korfage, I.J., Essink-Bot, M.L., Daamen, R., Mols, F., & van Ballegooijen, M. (2008). Women show mixed intentions regarding the uptake of HPV vaccinations in pre-adolescents: a questionnaire study. *European Journal of Cancer*, (44), 1186-1192.

Kwan, T.T.C., Chan, K.K.L., Yip, A.M.W., Tam, K.F., Cheung, A.N.Y., Young, P.M.C., et al. (2008). Barriers and facilitators to human papillomavirus vaccination among Chinese adolescent girls in Hong Kong: a qualitative-quantitative study. *Sexually Transmitted Infections*, (84), 227-232.

Marlow, A.V., Waller, J., & Wardel, J. (2007). Parental attitudes to pre-pubertal HPV vaccination. *Vaccine*, (25), 1945-1952.

Tissot, A.M., Zimet, G.D., Rosenthal, S.L., Bernstein D.I., Wetzel, C., & Kahn, J.A. (2007). Effective strategies for HPV vaccine delivery: the views of pediatricians. *Journal of Adolescent Health*, (41), 119-125.

Zimet, G.D., Mays, R.M., Winston, Y., Kee, R., Dickes, J., & Su, L. (2000). Acceptability of human papillomavirus immunization. *Journal of Women's Health and Gender-Based Medicine*, 9(1), 47-50.

12/10/08

US Preventative Services Task Force Scale:

http://www.ahrq.gov/clinic/uspstf/gradespre.htm#brec

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Conclusions

- **Recommendations**
- **Ratings**
- **Rationale**

Evidence Rating Scale

USPSTF = IPHA-NS EB Committee

A = Strongly recommended

B = Recommended

C = No recommendation

D = Not recommended

I = Insufficient evidence to make a recommendation

EBP Question: Lead

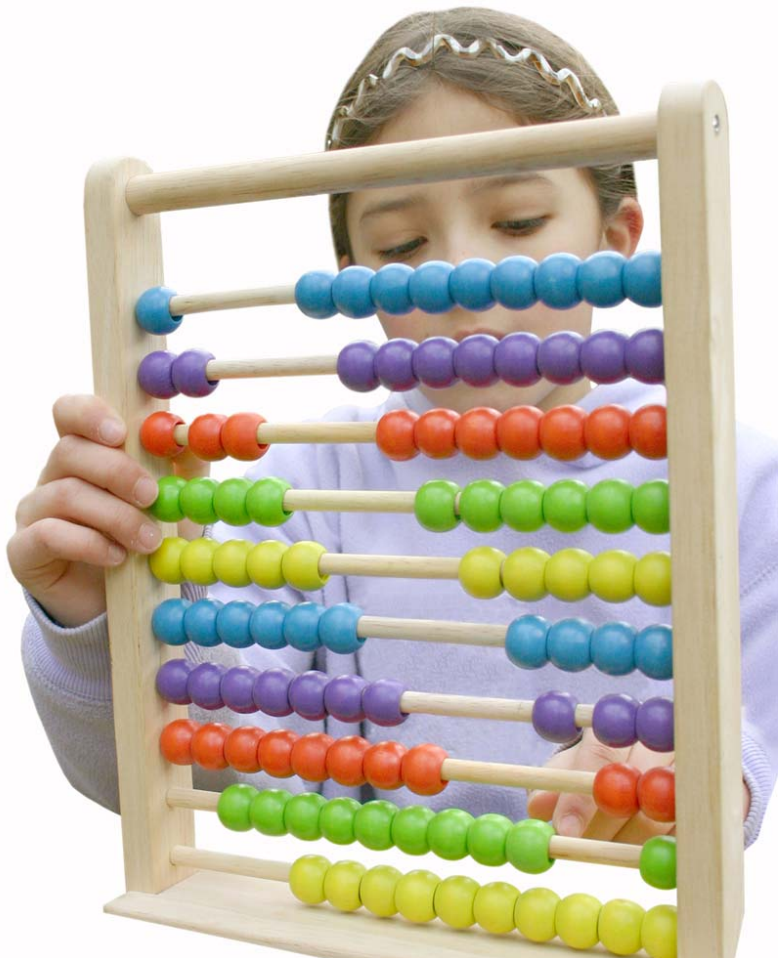
Prevention

In children (birth to 7 yr.), do population-focused strategies reduce blood lead levels and sequela? What are the strategies for primary prevention?

EBP Question: Lead

Treatment

Do population-focused treatment strategies influence the incidence of developmental delays in children age 0 to 7 yr., who have lead poisoning (blood lead levels of >10 mcg/ml)?



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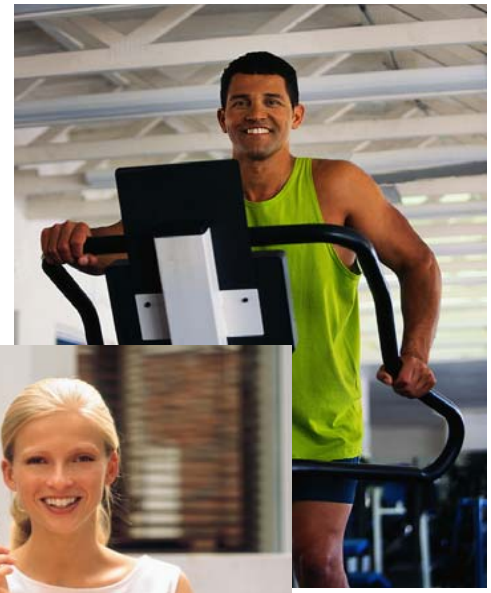
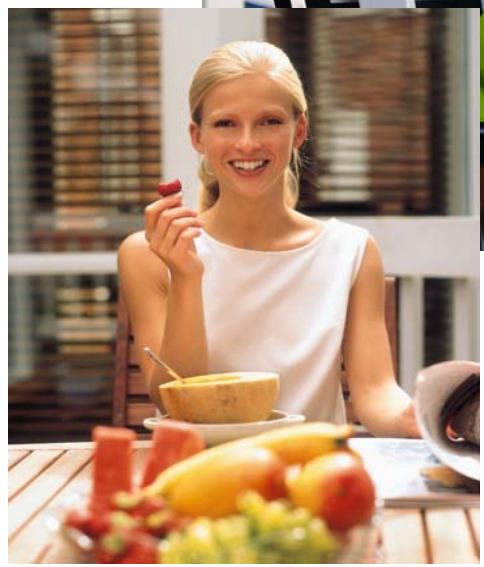
EBP Question: Chronic disease/adult/obesity

In young obese adults (20-40 yr of age not morbidly obese) without chronic illness, what are the preventive behavioral health strategies (excluding pharmaceutical management and surgery) that are effective in both reducing weight and increasing physical activity?





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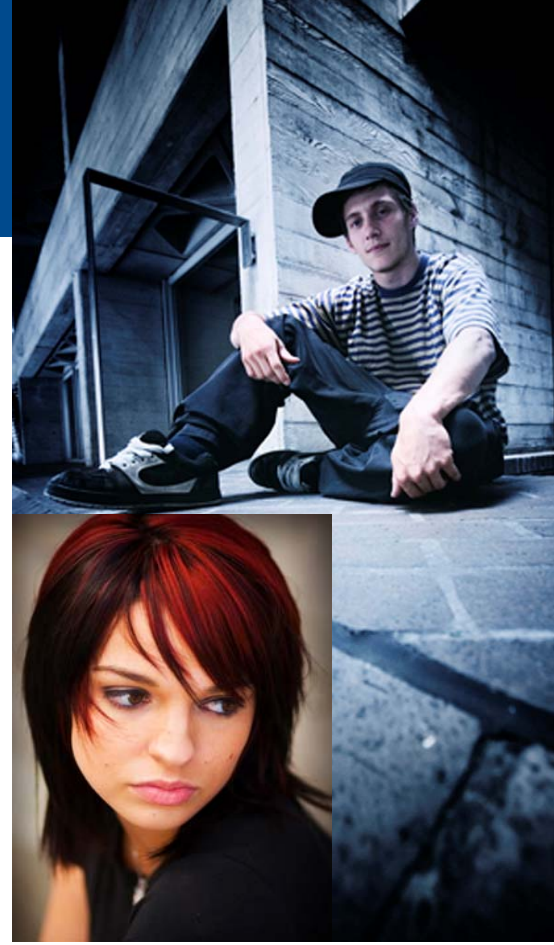
EBP Question: STDs



In 15-19 yr old, low-income, urban, sexually active adolescents, do intensive STD prevention education programs for high-risk behaviors (e.g., multiple partners, drug use, alcohol use, family dynamics) increase behavior change with subsequent rate reduction when compared to minimal STD prevention education programs (basic reading materials and condoms)?

EBP Question: Prenatal Outcomes

In 12 to 19 year olds, which population-focused nursing interventions result in reduced subsequent pregnancies?

Dissemination

- Illinois Public Health Association's website
- Illinois Department of Public Health's intranet
- APHNE website
- Professional publications
- Others???

http://www.ipha.com/

http://www.uic.edu/nursing/aphne

Questions from the Audience

Illinois Public Health Association - Nursing Section

Thank You !

"Coming together is a beginning; keeping together is progress; working together is success."

Henry Ford

Advancing Public Health Nursing Education in Illinois

project funded through the Health Resources & Services Administration

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HRSA