Reasons to Vaccinate

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Vaccines have greatly decreased or eradicated many infectious diseases that commonly harmed many infants, children, and adults. However, the viruses and bacteria that cause vaccine-preventable diseases (VPDs) still exist and can be easily passed on to people who are not fully protected by vaccines[1]. The success of a vaccine in protecting communities depends entirely on the extent of vaccine coverage. With enough people immunized against a disease, it is difficult for the disease to get a foothold in the community.

The Economic Burden of VPDs

Vaccines are the best protection against VPDs and related complications. Vaccines are also a safe and cost-effective tool. Low uptake of vaccines produces: (1) individual and society losses in terms of deaths and disabilities; (2) economic costs from doctor visits, hospital stays, and lost income. Ozawa et al. (2016) present a more thorough study among adults in the United States[2]. In 2015 alone, VPDs were responsible for an estimated economic burden of $9 billion. Adults who are not vaccinated contributed $7.1 billion, or 80 percent, of that burden.

Vaccine Efficacy: 13-Valent Pneumococcal Conjugate Case Study

Pneumococcal disease in adults was estimated at $1.86 billion in 2015[2]. Routine use of 13-valent pneumococcal conjugate, or PCV13, vaccine in children has already shown a direct reduction in invasive pneumococcal disease (IPD) among children. Furthermore, adult populations have indirectly benefited since reduced IPD in children has decreased transmission of the disease to adults. Within the first three years that PCV13 was introduced, Moore et al. (2015) estimated that 30,000 cases of IPD and 3,000 deaths had been prevented[3]. That being said, PCV13 serotypes still cause 20 to 25 percent of IPD cases in adults aged 65 years and older[4]. With the 2014 recommendation from the Advisory Committee on Immunization Practices (ACIP), immunization providers have the opportunity to prevent pneumococcal disease in this vulnerable adult population.

The Role of Vaccines in Antimicrobial Stewardship

When antibiotics are used for viral infections like the flu, patients are not getting the best care. A course of antibiotics will not fight the virus, help your patient feel better, or lead to a quicker recovery. It may even be harmful. Misuse of antibiotics is feeding the increase of drug-resistant bacteria. This leads to infections that are difficult, and sometimes even impossible, to cure. Timely, recommended pneumococcal vaccination lowers infections and transmission of pneumococcus – also slowing the spread of antibiotic-resistant infections. Strongly consider the role of vaccines as part of antimicrobial stewardship efforts[5].

Immunization Provider Actions

The increase in drug-resistant bacteria, recent disease outbreaks, and the significant economic burden of VPDs underscore the value of immunizing all of your patients according to the recommended schedules[6]. To keep patients up-to-date, it's crucial to assess immunization status and recommend needed vaccines at each clinical encounter. Recommending and administering vaccines during the same

visit reduces missed opportunities. Practices that don't stock all needed vaccines should make the recommendation and refer patients to a known vaccinating provider.

Help your office, your patients, and your patients' other providers know which vaccines they have had by using the Michigan Care Improvement Registry (MCIR). Practices should use MCIR to both assess patients' vaccine history and to document vaccines received by your patients. According to zoster vaccination data in MCIR from July 1, 2015 through June 30, 2016, approximately 1 in 45 administered doses were unnecessary second doses. By assessing patient history in MCIR, practices can avoid over-immunizing and improve the quality of patient services.

References

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