CME ACTIVITY

Advance Care Planning: Assuring the Care That Patients Want at the End of Life

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Advance care planning is the process by which patients can formalize and ensure that their preferences guide the care they receive at the end of life or during a time of decisional incapacity.1 If implemented appropriately, this iterative process has the potential to prevent unnecessary suffering, minimize futile care, and improve the quality of life for both the patient and the family.2-4

Effective advance care planning is generally best conducted over multiple clinical encounters, either in an outpatient or a nursing home setting, long before a life-threatening event ever occurs. It comprises several components, including the following:

- An assessment of the patient’s values about illness and death (personal as well as cultural)
- An honest appraisal of his or her treatment preferences under different scenarios
- The documentation of these preferences in a written format (i.e., a living will)
- The designation of a durable power of attorney for health care decisions should the patient become incapacitated (i.e., assigning one person to be the decision-making proxy).1-9

In California, an advance directive functions as a living will and a durable power of attorney for health care. Important features of advance directives include

- Advance directives only become active when a patient no longer has decision-making capacity.
- Advance directives can be changed at any time while the patient maintains decision-making capacity.
- A financial power of attorney is NOT the same as a durable power of attorney for health care.

continued on page 2 >
A Structured Process for Advance Care Planning

1. Initiate a guided discussion
   a. Discuss the patient’s cultural beliefs and values about end-of-life care.
   b. Share hypothetical scenarios and treatments applicable to the patient’s particular situation.
   c. Determine patient preferences for providing or withholding treatments under certain scenarios.
   d. Determine if the patient has a realistic understanding of the scenario, the treatment, and possible outcomes, including understanding the chances for positive outcomes.

2. Introduce the subject of advance care planning and offer information
   a. Encourage the patient to complete an advance directive.
   b. Educate the patient that when no advance directive exists, patients leave treatment decisions to physicians and family members.
   c. If applicable, encourage the patient to talk with clergy or a social worker to help answer any questions he/she may have, or to address concerns.

3. Prepare and complete advance care planning documents
   a. Select an appropriate advance directive form.
   b. Ensure that the patient’s care preferences in the document are sufficiently specific to be effective in directing care.
   c. Ensure that the patient provides copies of the advance directive to family members, health care agents, and health care providers.

4. Review the patient’s preferences on a regular basis and update information
   a. Remind the patient that advance directives may be revised at any time.
   b. Revisit the issue regularly, especially after major life events or new medical diagnoses.

5. Apply the patient’s desires to actual circumstances
   By regularly discussing advance care planning, physicians can improve patient satisfaction with care and provide individually appropriate care at the end-of-life. Many patients do not and will not lose their decision-making capacity at the end of life. Physicians and family members can continue discussing treatment preferences with these patients as their condition(s) changes.

How to Provide Culturally Competent, Family-Based Advance Care Planning

- Develop rapport and trust.
- Provide appropriate interpreter services.
- Demonstrate an interest in the patient’s cultural and spiritual heritage.
- Use open-ended questions, such as
  - “Is there anything that would be helpful for me to know regarding your culture and beliefs about serious illness and medical care?”
  - “What role does religion play in your decisions related to illness and treatment?”
- Avoid medical jargon.
- Confirm patient understanding of concepts.
- Focus the conversation on patient preferences for advance care planning.
- Be aware of common cultural variations in advance care planning:
  - Direct disclosure of prognosis to the patient may be viewed as disrespectful and impolite, eliminating hope or encouraging death.
  - Decision-making for treatment may involve a familywide consensus, with or without the patient. Selection of a single health care agent (decision-making proxy) may be a point of contention requiring a conversation distinguishing the role of familywide discussions from the legal need for a single decision-making proxy.
- Anticipate and address discussion areas in advance care planning that tend to vary among culturally diverse populations:
  - “Some people want to know everything about their medical condition and others do not. What is your preference?”
  - “Do you prefer to make medical decisions about future tests or treatment yourself, or would you prefer that someone else make them for you?”
  - “Some people do not want to be told what is wrong with them, but would rather their families be told instead. What do you prefer?”
There is NO mandated California advance directive form. All advance directives must be either acknowledged before a notary public or signed by at least two witnesses (CA Probate Code 4673).

An advance directive executed while a patient is in a skilled nursing facility must be witnessed by a patient advocate or ombudsperson (CA Probate Code 4675).

Advance directives are regarded as an essential feature of advance care planning (see page 2, A Structured Process for Advance Care Planning). When tailored appropriately to individual literacy and cultural needs, advance directives are highly acceptable to and desired by patients; they stimulate discussions about end-of-life options, and they decrease the stress of surrogate (proxy) decision-makers (see page 2, How to Provide Culturally Competent, Family-Based Advance Care Planning).

### Advance Care Planning Features

**What Is an Advance Directive?**

In California, an advance directive is a single document that allows patients to

- Appoint a health care agent (“Durable Power of Attorney for Health Care” or health care proxy) who has the legal authority to make health care decisions in the event that a patient no longer has decision-making capacity
- Prepare specific written instructions (“Living Will”) for future health care in the event that a patient no longer has decision-making capacity

**Where Can I Find Examples of Advance Directive Forms?**

A number of California advance directives are available as reference. Some are free of charge and available online.

- The Institute for Health Care Advancement (IHA), for example, offers a free California Advance Directive written in plain language (5th-grade reading level), in English, Spanish, Vietnamese, and Chinese. It is available at [www. iha4health.org/default.aspx/MenuItemID/266/MenuGroup/ _Home.htm](http://www.iha4health.org/default.aspx/MenuItemID/266/MenuGroup/_Home.htm).

Each patient should be encouraged to ask questions and consult an attorney or a social worker, where appropriate, to address any legal concerns or complex issues surrounding his or her particular circumstances.

### Economic and Social Burden of End-of-Life Care

According to the Agency for Healthcare Research and Quality (AHRQ), advance care planning can reduce health care costs by decreasing unnecessary treatments and improving the appropriateness of care. Approximately a quarter of all Medicare spending in the United States is devoted to the final year of life, based on national estimates. Locally, in Los Angeles County (LAC), end-of-life care remains expensive without commensurate increase in the quality of care. In a recent study comparing Los Angeles County to San Diego County (SDC), several indicators of cost were substantially higher in LAC than in SDC. LAC has 35% more hospital beds per 10,000 population and greater intensity of service use, particularly during the last 2 years of life. The end-of-life care cost per decedent in LAC was estimated at $43,000, as compared to $29,000 for SDC. Subsequent analyses of quality indicators of care—including patient satisfaction, percentage receiving antibiotics 1 hour prior to surgery, and process indicators for the disease management of conditions, such as acute myocardial infarction, congestive heart failure, and pneumonia—found no statistical differences in the quality of care received by decedents in LAC versus SDC. The author concluded that the higher per-capita end-of-life care expenditures in LAC were likely related to discretionary hospitalization.
admissions, relatively more aggressive end-of-life care, and lower use of hospice care.

Good end-of-life care can reduce the social burden as well. In a recent U.S. multisite, cohort study of patients with advanced cancer and their informal caregivers (n = 332 dyads), Wright et al. found that end-of-life discussions with cancer patients were associated with less aggressive medical care near death, earlier hospice referrals, better self-reported patient quality of life, and less reports of caregiver distress (e.g., regret, depression) during the bereavement period.4

Implications for Clinical Practice
Advance care planning represents an important but often missed opportunity to help prepare patients and their families for the emotional decisions about medical care near death. There are numerous opportunities in the health care delivery system, including during preventive health visits, in which this discussion can take place (see Table 1).

Patient preferences regarding end-of-life care are often unknown. All too often, hospital-based physicians encounter severely ill patients who have not discussed end-of-life treatment preferences with their primary care providers or with their families. These situations can be emotionally challenging, time-consuming, and often frustrating for providers and families alike. Aggressive care is associated with lower patient quality of life and more difficult bereavement adjustment.5,14,15 Additionally, family members of patients who have had an end-of-life conversation with a physician are less likely to develop major depressive episodes following the loved one’s death, suggesting that advance care planning can help prevent or lessen the impact of these adverse social and mental health outcomes.4

References
Providing the Right Route for Vaccination

Alvin Nelson El Amin, MD, MPH

The six “Rights” of vaccination are the right vaccine, the right patient, the right documentation, the right dosage, the right time, and the right route/manner. These are further described in the October 2010 issue of Rx for Prevention.

This column focuses on the right route or manner for vaccination and provides guidance on how to rectify and avoid vaccine route errors.

Vaccinating patients via the wrong route or manner, unfortunately, is not an uncommon situation. Documented errors include giving intramuscular vaccines subcutaneously, using an incorrect needle length, giving injections at the wrong angle, and even injecting oral or nasal vaccines. A recent study suggests that these types of errors are less common than vaccine dosing and timing errors.1 Nevertheless, giving a vaccine by the wrong route can lead to repeat doses, adverse events, reduced immunologic response, and wasted vaccine, so this issue warrants attention. Here are a few questions that have recently been posed to the LA County Department of Public Health’s Immunization Program.

On several occasions, infants receiving the oral rotavirus vaccine have spit the vaccine out. Should we re-administer the dose?

While there is limited data on the effectiveness of a partial dose of rotavirus vaccine, the safety of a higher-than-recommended dose has not yet been established. Thus, rotavirus vaccine should not be re-administered if an infant regurgitates, vomits, or spits out the vaccine.2 In this case, you do not need to re-administer the dose and should give any remaining doses in the vaccine series at the recommended intervals.

To prevent infants from spitting out the vaccine, give rotavirus vaccine at the beginning of the office visit, while the baby is still happy and before you administer injections or perform other procedures. Also, aim the dropper containing the vaccine down one side and toward the back of the child’s mouth. Be mindful not to insert the dropper so far back that you induce a gag reflex.

A staff member reported that he gave the rotavirus vaccine Rotarix via an intramuscular injection. Is it recommended that the dose be re-administered orally? Should we report this error to the Vaccine Adverse Event Reporting System?

Rotavirus vaccine is a live viral vaccine that should be administered by oral route only. When administered orally, rotavirus vaccine replicates in the small intestine, thereby inducing immunity.

This vaccine should not be given as an intramuscular (IM) injection. If it is inadvertently given IM, the dose should be repeated via the oral route. There is no mandatory waiting period between the improperly administered dose and the subsequent correctly administered dose.


I noticed in a patient chart that a staff member gave the third dose of hepatitis B vaccine to an adult in the buttocks. The package insert says it should be given to adults as an IM injection. Any advice?

It is correct that hepatitis B vaccine should be given to adults as an intramuscular injection, preferably in the deltoid muscle. Neither infants nor adults should receive this vaccine in the glutes because clinical trial data suggest that immunogenicity and seroconversion rates are substantially reduced when given in that site. Thus, the Centers for Disease Control and Prevention (CDC) recommends that if the hepatitis B vaccine was given to an adult at any site other than the deltoid or anterolateral thigh, that the dose be repeated.3 Any patients who received the dose in the glutes should be recalled to receive repeat doses.

A nurse at our walk-in flu vaccination clinic gave children and adults only half of the recommended LAIV dose (one spray in one nostril). Are these patients protected against the flu?

The effectiveness of a partial dose of live attenuated influenza vaccine (LAIV) has not been established, so it is not clear whether the patients who received a lower dose will be fully protected. Thus, it is recommended that you revaccinate these individuals intranasally with a full dose (.2 mL) as soon as they can return.

To help staff avoid future errors, please review with them, the LAIV administration process. LAIV is provided in a prefilled, single-use sprayer that contains .2mL of vaccine. Give half of the vaccine in the sprayer in the first nostril, remove the dose-divider clip, and spray the second half of the vaccine in the second nostril. Step-by-step instructions are detailed on the package insert at www.medimmune.com/pdf/products/flumist_pi.pdf and demonstrated in the video posted at www.flumist.com/hcp/influenza-vaccine-dosing.
Vaccination Resources

Training

Immunization Skills Training for Medical Assistants
The Immunization Skills Institute is a 4-hour course that trains medical assistants on safe, effective, and caring immunization skills. Topics include:

- Proper vaccine administration techniques
- Immunization documentation
- Effective communication
- Proper vaccine storage and handling

For more information and to register, visit the Immunization Program website at www.publichealth.lacounty.gov/ip or call (213) 351-7800.

EZIZ Online Interactive Vaccine Administration Training Modules
www.eziz.org/pages/eziz_training.html

DVD: “Immunization Techniques: Best Practices with Infants, Children, and Adults”
Revised in 2010 by the California Department of Public Health, this DVD can be used to train and orient new staff, as well as a refresher course for more experienced staff. It outlines recommended vaccine administration skills and techniques. To order a copy, visit www.immunize.org/shop/dvd-immunization-techniques.asp.

Educational

Skills Checklist for Immunizations
www.eziz.org/PDF/IMM-694.pdf

Administering Vaccines: Dose, Route, Site, and Needle Tipsheet
www.eziz.org/PDF/AdministeringVaccines.pdf

Injectable Vaccines by Route Tipsheet
www.eziz.org/PDF/IMM-899.pdf

Immunization Site Maps
www.aimtoolkit.org/children/immun/10_Giving_all_the_doses_12_mths.pdf
www.aimtoolkit.org/adolescents/immun/GivingAllTheDosesAdolescent_RF.pdf

Anatomic Sites Poster
www.eziz.org/PDF/IMM-685.pdf (English)
www.eziz.org/PDF/IMM-685S.pdf (Spanish)
I have a lot of parents who are concerned with the number of injections in the same limb. Is it safe to administer two or three vaccines in one limb?

Yes. The Advisory Committee on Immunization Practices and the American Academy of Pediatrics consistently recommend administering all needed vaccines during a single office visit (unless there are contraindications or precautions). When multiple vaccines are administered during the visit, try to administer each vaccine at a different anatomic site. For infants and younger children, if more than two vaccines must be injected into a single limb, the thigh is the preferred site because of the greater muscle mass. The injections should be administered 1”-2” apart so that any local reactions can be differentiated. For older children and adults, the deltoid muscle can be used for more than one intramuscular injection. Providers should consider using a vaccination site map so that all persons administering vaccines routinely use a particular anatomic site for each different vaccine. Vaccination site maps for infants, children, and adults are available on the CDC website at www.cdc.gov/vaccines/recs/vac-admin/default.htm.

Studies have shown that parents and providers might be uncomfortable with multiple injections during a visit.3 To decrease the number of injections administered during a visit, consider using a combination vaccine (e.g., Pentacel, Pediarix, Comvax, Kinrix, Twinrix, and Trihibit). These reduce the number of injections patients receive to keep them up-to-date and alleviate concern about multiple injections. Licensed combination vaccines can be used whenever any components of the combination are indicated, the vaccine is licensed by the Food and Drug Administration (FDA) for that dose in the series, and the vaccine’s other components are not contraindicated. Be sure to observe the spacing requirement of the component vaccine with the longest spacing interval.

I recently administered an intramuscular vaccine and noticed that some of the vaccine leaked around the needle. What should I do?

It is not necessary to repeat the dose. However, to prevent future occurrences, observe the following guidelines.

First, prior to preparing the vaccine, make sure you securely fasten the needle onto the syringe. This will prevent leakage between the needle and syringe when drawing up and administering the vaccine.

Second, assess the patient for an appropriate site to administer vaccine, intramuscular or subcutaneous. Choose the needle size and injection site for each person based on the size of the muscle, the thickness of adipose tissue at the injection site, the volume of the material to be administered, injection technique, and the depth below the muscle surface into which the material is to be injected.

• For IM injections, the needle should be long enough to reach the muscle mass and prevent vaccine from seeping into subcutaneous tissue, but not so long as to involve underlying nerves, blood vessels, or bone. Insert the needle at a 90-degree angle to the skin, preferably into the anterolateral aspect of the thigh or the deltoid muscle of the upper arm, depending on the patient’s age.

• Administer subcutaneous injections at a 45-degree angle, using a 5/8-inch, 23- to 25-gauge needle. Subcutaneous injections should usually be given in the thigh for infants aged <12 months and in the upper OUTER triceps area for persons aged ≥12 months. If needed, subcutaneous injections may be administered into the upper OUTER triceps area of an infant.

To help avoid vaccination errors in the medical practice, follow these tips:

• Provide competency-based training on vaccine administration for new and seasoned staff to ensure vaccines are administered in a safe and effective manner. Validate your staff’s knowledge using the Skills Checklist for Immunization posted at www.eziz.org/PDF/IMM-694.pdf.

• Post Anatomic Sites posters in every room where vaccines are administered as a reminder for staff who administer the vaccines.

• Use immunization site maps to develop injection site procedures for your office/clinic site. These can remind the staff of your practice’s policy regarding where to administer specific vaccines (i.e., your policy might be to always administer DTaP in the right thigh and PCV in the left thigh).

• Review the following educational materials to determine the recommended route and needle size for each vaccine:

  - Los Angeles County DPH B-71: Recommendations for Use and Storage of Immunobiologics and Other Prophylactic Agents, www.publichealth.lacounty.gov/ip/providers/B71.htm


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REFERENCES


Rx for Prevention is published 10 times a year by the Los Angeles County Department of Public Health. If you would like to receive this newsletter by e-mail, go to www.publichealth.lacounty.gov and subscribe to the ListServ for Rx for Prevention.

Upcoming Trainings

Immunization Training Resources for Clinicians
The Los Angeles County Department of Public Health Immunization Program, the California Department of Public Health, the CDC and other entities offer a variety of web-based and in-person immunization training programs for clinicians and staff. Some programs offer CMEs and CEUs at no charge. Visit www.publichealth.lacounty.gov/ip or call (213) 351-7800.

Immunization Skills Training for Medical Assistants
The Immunization Skills Institute is a 4-hour course that trains medical assistants on safe, effective, and caring immunization skills. Visit www.publichealth.lacounty.gov/ip or call (213) 351-7800.

Index of Disease Reporting Forms

All case reporting forms from the LA County Department of Public Health are available by telephone or Internet.

Reportable Diseases & Conditions
Confidential Morbidity Report
Morbidity Unit (888) 397-3993
Acute Communicable Disease Control
(213) 240-7941

Sexually Transmitted Disease
Confidential Morbidity Report
(213) 744-3070
www.publichealth.lacounty.gov/std/providers.htm (web page)
www.publichealth.lacounty.gov/std/docs/H1911A.pdf (form)

Adult HIV/AIDS Case Report Form
For patients over 13 years of age at time of diagnosis
HIV Epidemiology Program
(213) 351-8196
www.publichealth.lacounty.gov/HIV/hivreporting.htm

Pediatric HIV/AIDS Case Report Form
For patients less than 13 years of age at time of diagnosis
Pediatric AIDS Surveillance Program
(213) 351-8153
Must first call program before reporting
www.publichealth.lacounty.gov/HIV/hivreporting.htm

Tuberculosis Suspects & Cases
Confidential Morbidity Report
Tuberculosis Control (213) 744-6160
www.publichealth.lacounty.gov/tb/forms/cmr.pdf

Lead Reporting
No reporting form. Reports are taken over the phone.
Lead Program (323) 869-7195

Animal Bite Report Form
Veterinary Public Health (877) 747-2243
www.publichealth.lacounty.gov/vet/biteintro.htm

Animal Diseases and Syndrome Report Form
Veterinary Public Health (877) 747-2243
www.publichealth.lacounty.gov/vet/disintro.htm

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