**Adenocarcinoma.** A very rare form of anal cancer that develops from glands in the anus or from the skin outside the anus. This type of cancer is generally thought not to be related to HPV.

**Anal Cancer.** Cancer that affects the anus and occurs when normal healthy cells turn into abnormal cells, which then grow at an accelerated rate destroying healthy cells. Over 93% of anal cancers are caused by HPV, a virus that is transmitted through skin-to-skin contact.

**Anal Intraepithelial Neoplasia (AIN).** The presence of abnormal cells in the anus. It may be a precursor to anal cancer.

**Anoscopy.** A procedure for examining the anus by placing a small plastic or metal cone or scope into the anal canal to view it and check for abnormal tissue. See high-resolution anoscopy (HRA).

**Anus.** The anus is an opening to the outside of the body below the rectum from which stool exits the body. It is the last part of the gastrointestinal tract.

**Basaloid Cancer.** A form of anal cancer that is a variation of squamous cell carcinoma. See squamous cell carcinoma.

**Biopsy.** When tissue is removed from the body and sent to a pathologist to be examined. This investigation can determine whether or not the cells are cancerous. A biopsy is how cancer is most commonly diagnosed.

**Cancer.** Cancer occurs when cells become abnormal and grow and invade healthy tissue uncontrollably. There are many different types of cancer and they are named according to the original cell from which they developed.

**Chemotherapy.** A form of cancer treatment that kills cancer cells. Chemotherapy has been used in the treatment of other diseases as well.

**Colposcopy.** An exam of the cervix that may occur after abnormal Pap test results are found. During this procedure, acetic acid is put on the cervix and the cervix is then examined with a bright light and a magnification tool called a colposcope. A provider may decide to do a biopsy if he/she identifies any abnormalities.

**DARE or DRE.** A procedure in which a provider inserts gloved fingers into the anus to identify if there are any abnormalities or growths. It can be used to feel for anal cancer. Most anal cancers can be felt except for the very earliest cancers. These acronyms stand for digital anorectal exam (DARE) and digital rectal exam (DRE).

**HRA.** High-resolution anoscopy (HRA) is a procedure using a high-resolution magnifying instrument called an anoscope to identify abnormal cells in the anus. During this procedure, acetic
acid is put on the anus and the anus is then examined with a bright light and a magnification tool called an anoscope (similar to a colposcope used to identify cervical abnormalities).

**HPV (human papillomavirus).** Skin viruses consisting of more than 100 strains. Of these strains, 40 are sexually transmitted and about 13 of those can cause cancer. HPV can cause warts, RRP (recurring respiratory papillomatosis) and at least six cancers -- anal, cervical, oropharyngeal, penile, vaginal and vulvar. Frequently HPV goes away on its own, however, for some it can remain dormant in the body for decades causing cancers to surface later in life. HPV can be either “high-risk” or “low-risk.” High-risk HPV has the ability to cause certain cancers. Low-risk HPV is typically associated with warts.

**HPV Test.** A test that detects the presence of HPV DNA by looking for HPV DNA in cells. The test is only approved for women over the age of 30 in the US. This test is different from a Pap test. Neither the Pap test nor HPV test determine whether or not cancer is present, but serve as a screening tool to see if HPV is present or the cells are abnormal.

**Immunotherapies.** An emerging intervention against cancer that seeks to harness the power of the individual’s immune system. Currently, immunotherapies are being studied and used in clinical trials. They are not FDA approved.

**Malignant Melanoma.** A form of anal cancer that occurs in the cells of the skin of the anal lining responsible for pigment and makes up less than 2% of anal cancers.

**Medical Test.** A procedure to determine the presence or absence of an infection, disease or condition.

**Pap Test.** A screening tool where cells are collected and examined under a microscope to determine if there are abnormalities. These cells are viewed under a microscope. A Pap test can be used on the cervix and/or the anus.

**Pre-Cancer.** The presence of abnormal cells or lesions that have potential to turn into cancer. Pre-cancer does not necessarily mean that cancer will occur. It is important to take the appropriate steps outlined by your healthcare provider after receiving a pre-cancer diagnosis to try to avoid the development of cancer.

**Radiation Therapy.** A type of medical treatment that focuses a beam of energy on a specific part of the body to kill cancer cells and shrink tumors. Radiation can be used as the primary form of cancer treatment or with chemotherapy.

**Screening Test.** Tests used in the general population or in certain parts of the population who may be at higher risk for a certain disease to detect disease in its earliest form before it causes symptoms.

**Sexually Transmitted Infection (STI).** An infection that can be passed from one person to another.
during sexual intimacy. One does not need to have intercourse to catch and transmit HPV.

**Squamous Cell Carcinoma.** A cancer that develops from skin or skin-like cells. These cells also line the anus, mouth, vagina, vulva, cervix and penis. Most anal cancers are squamous cell carcinoma. Sometimes pathologists will use different names such as cloacogenic or basaloid carcinoma. These are just types of squamous cell carcinoma.

**Vaccine.** A medical treatment to prevent the occurrence of a disease or infection (prophylactic or preventative vaccines) or stimulate the body to fight an existing infection (therapeutic vaccine). There are two preventive vaccines for HPV: Gardasil and Gardasil 9. It is recommended that individuals receive the vaccine as early as possible to ensure its full immunization potential. All children in the US are recommended to get the HPV vaccine at ages 11 and 12, but individuals can get it up to age 26. In the UK, girls get the vaccine at ages 12 and 13 through NHS and can receive it through age 18. Boys will be included in the national vaccination programme starting September 2019.

These fact sheets were reviewed by an oncologist, infectious disease doctor and nurse.