

Breast Pumps

Clinical Policy ID: CCP.1051

Recent review date: 2/2026

Next review date: 6/2027

Policy contains: Electric breast pumps, hospital breast pumps, manual breast pumps.

Keystone First VIP Choice has developed clinical policies to assist with making coverage determinations. Keystone First VIP Choice's clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of "medically necessary," and the specific facts of the particular situation are considered by Keystone First VIP Choice, on a case by case basis, when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. Keystone First VIP Choice's clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. Keystone First VIP Choice's clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, Keystone First VIP Choice will update its clinical policies as necessary. Keystone First VIP Choice's clinical policies are not guarantees of payment.

Coverage policy

Breast pumps may be helpful for the initiation or continuation of breastfeeding when any of the following criteria are met (American Academy of Family Physicians, 2022; American College of Obstetricians and Gynecologists, 2023; Health Resources and Services Administration, 2025; Meek, 2022):

- The mother is unable to nurse and provide adequately for her infant(s).
- (Temporarily) while the mother takes medications that can be found in breast milk and would injure her infant(s).

Choice of breast pump depends on several factors, including infant need, the length of the breastfeeding parent's absence from the infant, and maternal preference. A hand pump may be used when mother and infant are separated briefly, and an electric pump or a hospital-grade electric pump for longer and more frequent separations (American Academy of Family Physicians, 2022).

A new set of breast pump supplies (i.e., initial tubing, shields, and bottles) is medically necessary with each subsequent pregnancy (American Academy of Family Physicians, 2022).

Limitations

No limitations were identified during the writing of this policy.

Alternative covered services

Bright Start[®] services and lactation specialists as part of hospital delivery.

Background

Several professional organizations have reiterated strong support for the exclusive nutrition of infants through breast milk for the first six months of life, and up to and exceeding the first year, citing studies that have demonstrated the benefits of breast milk over other sources of nutrition (American College of Obstetricians and Gynecologists, 2023; Meek, 2022; World Health Organization, 2025). Benefits to breastfeeding found in the medical literature include:

- Improved health to infants. Benefits include reduced risk of otitis media, urinary tract infection, respiratory tract infection, bronchiolitis, necrotizing enterocolitis, atopic dermatitis, gastroenteritis, inflammatory bowel disease, diabetes, childhood leukemia (acute lymphocytic leukemia and acute myeloid leukemia), sudden infant death syndrome, infant mortality, asthma, allergies, and celiac disease.
- Improved health to mothers. Benefits include reduced risk of postpartum blood loss, postpartum depression, risk of subsequent child abuse and neglect (after adjusting for risk factors), and an increase in rapid uterine involution.

The American Academy of Pediatrics' recommendations also include contraindications to breastfeeding, including presence of certain infant metabolic disorders, and maternal conditions, such as tuberculosis, brucellosis, human T-cell lymphotropic virus type I or II, varicella, H1N1 influenza, and presence of particular narcotic drugs. Reductions in smoking, alcohol consumption, and a balanced diet are also recommended for breastfeeding mothers (Meek, 2022).

Lack of knowledge, social norms, poor family or social support, lactation problems, and employment present barriers to effective breastfeeding. Current 2021 data showing the percentages of infants who are breastfed at one year (39.5%) and breastfed exclusively through the first six months of age (27.2%) are well below the Healthy People 2030 goals (54.1% and 42.4%, respectively) (U.S. Department of Health and Human Services, Undated). Disparities between racial and ethnic groups have persisted. For infants born between 2011 and 2022 in the United States, breastfeeding initiation rates were significantly lower for non-Hispanic Black (58.5%) and Hispanic Black (78.5%) individuals, and significantly higher for Black immigrants (88.8%), compared with non-Hispanic White individuals (84.1%) (Roess, 2025).

When a mother has to initiate or maintain breastfeeding, the mother's own milk supply needs to be protected and/or increased by adequate pumping or manual expression and safe storage practices. Breast pumps are devices that extract milk from lactating women. Pumps can be manual, electric, or the hospital type needed to provide breast milk for premature infants. Manual pumps require repetitive use of pressure generated by hand or foot power, but they may cause fatigue and are often less efficient than electric pumps. Personal-use electric pumps are larger than manual pumps and generate greater suction. As such, the time required for expression of milk is shorter. These pumps are intended for a single user and may require more sterilization of the tubing. Hospital-grade electric pumps are intended for multiple users with accessories for each individual. They may provide greater stimulation to maintain adequate lactation than either the manual or personal electric pump (American Academy of Family Physicians, 2022).

Findings

Guidelines

Current professional guidelines and health policy support efforts to promote breastfeeding. Breast pump provision is an important component of these efforts. There is less consensus on the optimal type of pump to provide.

In accordance with the provisions in the Affordable Care Act, the Health Resources and Services Administration's Women's Preventive Services Guidelines recommend comprehensive lactation support services, which includes breastfeeding equipment and supplies, during the antenatal, perinatal, and postpartum periods to optimize the successful initiation and maintenance of breastfeeding. Breastfeeding equipment and supplies include, but are not limited to, double electric breast pumps (including pump parts and maintenance) and breast milk storage supplies. The guidelines stress prioritizing access to double electric pumps and not having access be predicated on prior failure of a manual pump. Breastfeeding equipment may also include equipment and supplies as clinically indicated to support mother and infant with breastfeeding difficulties and those who need additional services (Health Resources and Services Administration, 2025).

The U.S. Preventive Services Task Force (2025) recommends providing interventions during pregnancy and after birth to support breastfeeding, which include breast pumping as part of lactation support.

The American Academy of Family Physicians recommends that all babies, with rare exceptions, be breastfed and/or receive expressed human milk exclusively for the first six months of life, and longer as mutually desired. The breastfeeding parent's own milk supply should be protected and/or increased as needed by adequate pumping or manual expression. The optimal method of milk expression varies with the length of the breastfeeding parent's absence from the infant and individual preference. A hand pump may be used when mother and infant are separated briefly, and a hospital-grade electric pump for longer and more frequent separations (American Academy of Family Physicians, 2022). The American College of Obstetricians and Gynecologists (2023) practice advisory aligns with these recommendations.

The American Academy of Pediatrics supports continued breastfeeding, along with appropriate complementary foods introduced at about six months, as long as mutually desired by mother and child for two years or beyond. The Academy lists insurance coverage for lactation support and breast pumps among its key recommendations for policies that protect breastfeeding (Meek, 2022).

Evidence review

For mothers who wish to breastfeed, breast pumps provide effective support for exclusive breastfeeding by inducing lactation, relieving engorgement, and allowing for breast milk expression and storage when direct breastfeeding does not occur. Breast pumps may be provided as a part of comprehensive lactation support services during the antenatal, perinatal, and postpartum periods to optimize the successful initiation and maintenance of breastfeeding. However, improving access to breast pumps does not necessarily improve breastfeeding outcomes, which suggests that other factors may be involved that are barriers to achieving breastfeeding goals (Moran, 2015). Stigma, lack of support, and workplace barriers are obstacles that hinder continued breastfeeding.

A large cross-sectional analysis of 19,719 mothers in the United States found age younger than 18 years, Medicaid enrollment, race, and ethnicity other than non-Hispanic White, lower income or education, and unmarried status was associated with lower pump use ($P < .001$). Pump use was associated with a 37% lower risk of breastfeeding cessation (adjusted hazard ratio 0.63, 95% confidence interval 0.56 to 0.70) and 21 additional weeks of breastfeeding on average (Nardella, 2024).

Early evidence was insufficient to assess the effectiveness of breast pumping with or without other expression methods for improving breastfeeding rates in specific populations of women who are less likely to breastfeed, such as those of African American ancestry, with overweight or obesity, or with diabetes. Most studies lacked sufficient rigor, power, and detail to understand the impact of maternal and infant social, educational, and physical support that could help mothers achieve optimal breastfeeding outcomes (Bream, 2017; Fair, 2019; Moorhead, 2024).

However, more recent evidence of moderate certainty suggests the use of a breast pump in the early postpartum period after a Caesarean section is more effective in accelerating the onset of lactation than women receiving standard care (mean difference -19.57 hours, 95% confidence interval -26.18 to -12.96 hours; n = 143; two studies). Nonetheless, studies with large sample sizes focusing on feasibility and implementation in clinical practice are necessary to determine the best ways of promoting breastfeeding in this population (Miyachi, 2025).

An updated systematic review of 90 randomized controlled trial data, produced for the U.S. Preventive Services Task Force, found breastfeeding support interventions by a professional (e.g., a nurse, midwife, lactation consultant, or trained peer interventionist) were associated with higher rates of any and exclusive breastfeeding at various time points up to six months postpartum. There is limited evidence to inform on how breastfeeding support interventions affect infant and maternal health outcomes beyond rates of breastfeeding. Notably, approximately one-third of the trials took place in the United States and represented women for whom rates of breastfeeding were historically low, such as low-income Hispanic or Latina and Black women (Patnode, 2025).

There is no strong evidence supporting one method of milk expression (by hand or by any type of pump) over another (Becker, 2016). Choice of breast pump will depend on the reasons why the mother wishes to express milk and the contexts in which they do so. Social support is essential to the initiation and maintenance of milk expression to overcome barriers to breastfeeding. Perceived comfort and usefulness of the device have a positive influence on maternal health and wellbeing, as do understanding the reasons for using a breast pump (Becker, 2021).

The evidence associating pump use with longer breastfeeding duration is mixed. Sociodemographic factors are important contributors to differences in breastfeeding rates and use of breast pumps across populations. A review of 10 studies showed mothers in the workplace who received a breast pump for one year experienced longer duration of exclusive breastfeeding (8.3 months versus 4.7 months), but older maternal age, working part-time, longer maternity leave, and white ethnicity were also associated with longer breastfeeding duration (Kim, 2019).

A Cochrane review examined 41 randomized and quasi-randomized trials of different methods of milk expression. Trials of pumps compared one or more type of pump versus hand expression (11 trials), one type of pump to another (14 trials), and both hand expression and pump types (three trials). The risk of bias of the included studies was variable as were the study protocols and measured outcomes. There is no strong evidence supporting one method of milk expression (by hand or by any type of pump) over another with respect to maternal satisfaction, pain or discomfort, or milk contamination, volume, or composition. Effects on breastfeeding rates were not analyzed. However, there were consistent, clinically relevant and positive outcomes for milk expression related to techniques such as initiation of pumping soon after birth if the infant is not breastfeeding, increased frequency of pumping, warming of breast, massaging of breast, and various methods to encourage relaxation (Becker, 2016).

For treating breast engorgement during lactation, another Cochrane review found one small study (n = 16) comparing electromechanical breast massage followed by mechanical pumping versus manual breast massage followed by manual pumping. There was insufficient evidence to draw conclusions from this study (Zakarija-Grkovic, 2020).

In 2025, we reorganized the findings section, added new systematic reviews and large studies, and modified the coverage criteria to better align with guideline recommendations.

In 2026, we updated the references with no policy changes warranted.

References

On December 10, 2025, we searched PubMed and the databases of the Cochrane Library, the U.K. National Health Services Centre for Reviews and Dissemination, the Agency for Healthcare Research and Quality, and the Centers for Medicare & Medicaid Services. Search terms were “breast milk expression” (MeSH), “breast pump,” and “electric breast pump.” We included the best available evidence according to established evidence hierarchies (typically systematic reviews, meta-analyses, and full economic analyses, where available) and professional guidelines based on such evidence and clinical expertise.

American Academy of Family Physicians. Breastfeeding, family physicians supporting (position paper).

<https://www.aafp.org/about/policies/all/breastfeeding-position-paper.html#:~:text=The%20AAFP's%20policy%20on%20breastfeeding,first%20six%20months%20of%20life.&text=The%20AAFP%20also%20supports%20breastfeeding,as%20long%20as%20mutually%20desired.>

Published January 2022.

American College of Obstetricians and Gynecologists. Practice advisory to update the duration of

breastfeeding. <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2023/02/duration-of-breastfeeding-update>. Published February 2023.

Becker GE. Measuring mothers' viewpoints of breast pump usage. *Int J Environ Res Public Health*. 2021;18(8):3883. Doi: 10.3390/ijerph18083883.

Becker GE, Smith HA, Cooney F. Methods of milk expression for lactating women. *Cochrane Database Syst Rev*. 2016;9(9):CD006170. Doi: 10.1002/14651858.CD006170.pub5.

Bream E, Li H, Furman L. The effect of breast pump use on exclusive breastfeeding at 2 months postpartum in an inner-city population. *Breastfeed Med*. 2017;12:149-155. Doi: 10.1089/bfm.2016.0160.

Fair FJ, Ford GL, Soltani H. Interventions for supporting the initiation and continuation of breastfeeding among women who are overweight or obese. *Cochrane Database Syst Rev*. 2019;9(9):Cd012099. Doi: 10.1002/14651858.CD012099.pub2.

Health Resources and Services Administration. Women's preventive services guidelines.

<https://www.hrsa.gov/womens-guidelines>. Date last reviewed December 2025.

Kim JH, Shin JC, Donovan SM. Effectiveness of workplace lactation interventions on breastfeeding outcomes in the United States: An updated systematic review. *J Hum Lact*. 2019;35(1):100-113. Doi: 10.1177/0890334418765464.

Meek JY, Noble L, Section on Breastfeeding. Policy statement: Breastfeeding and the use of human milk. *Pediatrics*. 2022;150(1):1-15. Doi: 10.1542/peds.2022-057988.

Miyauchi A, Uchimura M, Takahashi M, Horiuchi S, Ota E. Effectiveness of breast pumps in early postpartum breastfeeding for women after cesarean section: A systematic review. *Jpn J Nurs Sci*. 2025;22(1):e12643. Doi: 10.1111/jjns.12643.

Moorhead AM, Amir LH, Crawford SB, Forster DA. Breastfeeding outcomes at 3 months for women with diabetes in pregnancy: Findings from the diabetes and antenatal milk expressing randomized controlled trial. *Birth*. 2024;51(3):508-520. Doi: 10.1111/birt.12807.

Moran VH, Morgan H, Rothnie K, et al. Incentives to promote breastfeeding: A systematic review. *Pediatrics*. 2015;135(3):e687-702. Doi: 10.1542/peds.2014-2221.

Nardella D, Canavan M, Sharifi M, Taylor S. Quantifying the association between pump use and breastfeeding duration. *J Pediatr*. 2024;274:114192. Doi: 10.1016/j.jpeds.2024.114192.

Patnode CD, Senger CA, Coppola EL, Iacocca MI. Interventions to support breastfeeding: Updated evidence report and systematic review for the U.S. Preventive Services Task Force [Internet]. Evidence Synthesis No. 242. AHRQ Publication No. 24-05316-EF-1. Rockville, MD: Agency for Healthcare Research and Quality; 2025.

Roess AA, Robert RC. Differences in breastfeeding rates among African Americans, Black immigrants, and Hispanic Black individuals compared to other race/ethnicity groups for infants born between 2011 and 2022, United States. *Am J Public Health*. 2025;115(11):1938-1941. Doi: 10.2105/ajph.2025.308242.

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Infants. Healthy People 2030. <https://odphp.health.gov/healthypeople/objectives-and-data/browse-objectives/infants>. Undated.

U.S. Preventive Services Task Force. Final recommendation statement. Breastfeeding: Primary care behavioral counseling interventions. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/breastfeeding-primary-care-interventions>. Published April 11, 2025.

World Health Organization. Breastfeeding. https://www.who.int/health-topics/breastfeeding#tab=tab_1. Published 2025.

Zakarija-Grkovic I, Stewart F. Treatments for breast engorgement during lactation. *Cochrane Database Syst Rev*. 2020;9(9):Cd006946. Doi: 10.1002/14651858.CD006946.pub4.

Policy updates

9/2013: initial review date and clinical policy effective date: 3/2014

2/2019: References updated. The policy number was changed from CP#12.02.01 to CCP.1051.

1/2020: Policy references updated.

1/2021: Policy references updated.

1/2022: Policy references updated.

1/2023: Policy references updated.

1/2024: Policy references updated.

2/2025: Policy references updated. Coverage modified.

2/2026: Policy references updated.

Related Codes

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy CCP.1051. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill accordingly.

Code	Code Description
A4281	Tubing for breast pump, replacement
A4282	Adapter for breast pump, replacement

Code	Code Description
A4283	Cap for breast pump bottle, replacement
A4284	Breast shield and splash protector for use with breast pump, replacement
A4285	Polycarbonate bottle for use with breast pump, replacement
A4286	Locking ring for breast pump, replacement
A4287	Disposable collection and storage bag for breast milk, any size, any type, each
E0602	Breast pump, manual, any type
E0603	Breast pump, electric (AC and/or DC), any type
E0604	Breast pump, hospital grade, electric (AC and/or DC), any type